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The 1998 Montana Gambling Study

*A Report to the Governor and the 56th Legislature
by the
Gambling Study Commission*

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55th Montana Legislature

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September 30, 1998

Dear Governor Racicot and Montana Legislators:

Attached is the final report of the Gambling Study Commission. It was an honor to chair this Commission. My fellow Commissioners and I took our charge very seriously. I have never been associated with volunteers who have become so personally involved with their project as this group did. Each Commissioner helped guide the project from start to finish.

The State of Montana was fortunate to have high quality proposals submitted for consideration. The team that was awarded the contract has members with impeccable professional reputations and also has a track record of doing quality work. One member of the research team is one of the world's leading scientists in the field of gambling studies.

We are passing on to you a considerable amount of scientific data. As in many studies of human behavior, there are not always clear cut results on which to base public policy. There are many facts based on sound scientific methods, but these facts don't always paint a perfectly clear and simple picture. Not all the questions raised by all stakeholders were or could be answered with precision. However, there are many questions that were answered completely, or nearly so; and the public policy discussion can certainly begin with them.

Given the budget of this project there is a copious amount of data. It should be noted that the "raw" data from the study (without any individual identifiers that would compromise privacy) are available to any member of the public with an interest in doing further analyses.

Each Commissioner has agreed to answer any question that any of you may have about how the Commission functioned. Please do not hesitate to contact any of us.

The Commission would also like to acknowledge and thank the two support persons that were assigned to assist us from the Legislative Services Division. They both did exemplary work.

Sincerely,

A handwritten signature in cursive script that reads "S. Taylor".

Shannon Taylor, Commission Chairman

TABLE OF CONTENTS

THE COMMISSION'S OVERVIEW AND SUMMARY	1
Introduction	1
Genesis and Purpose of the Study	3
Processes and Procedures	4
Caveat	6
Selective Summary of Findings	8
Policy Implications	11
Legislative Options	17
Acknowledgments	22
Select Source Materials	23
Books	23
Reports	23
ENDNOTES	25
APPENDIX 1	
APPENDIX 2	
STUDY TEAM'S NARRATIVE FINAL REPORT	
TECHNICAL APPENDIX	

THE COMMISSION'S OVERVIEW AND SUMMARY

Prepared by staff Research Analyst Stephen Maly

Introduction. Gambling is a controversial activity in Montana and has been for a long time. For the past hundred years, citizens of the Treasure State have engaged in gambling activities of all kinds--legal or not--for thrills, fun, and the chance of striking it rich. Notwithstanding the popularity of this pursuit, the moral climate in Montana and elsewhere in the U.S. has, off and on, militated against its legitimacy. The first Legislative Assembly of the Montana Territory outlawed a number of games of chance, and the 1889 Constitution forbade gambling. In more recent decades, at least some forms of gambling have become more socially (and hence politically) acceptable. Since 1926, for example, betting on horse races has been allowed, and in 1937 the Legislature legalized table games such as blackjack, pinochle, and cribbage in licensed drug stores, cigar stores, and charitable clubs. In 1945 fraternal, religious, and charitable organizations were authorized to operate slot machines, but 5 years later, the state Supreme Court invalidated the measure and voters in Montana rejected by a large margin a referendum to legalize slot machines.*

A general overhaul of the state constitution in 1972 resulted in a provision that authorized the Legislature (or the voters, through the initiative process) to legalize gambling.** From that point forward, and especially following landmark court decisions in the 1970s and the passage of laws permitting electronic poker and keno machines in bars in the 1980s, gambling issues of small and large magnitude have been visited upon the Legislature on a perennial basis. In the 1997 Legislative Session, for example, 20 gambling-related measures were introduced, 6 of which were passed.¹ In 1995, 6 of

* For a succinct history of gambling's expansion and contraction until 1993, see Duncan Adams' *Gambling: High Stakes Industry* in *Montana Magazine*, Feb. 1995, p. 44.

** Article III, section 9, of the Montana Constitution states that "All forms of gambling, lotteries, and gift enterprises are prohibited unless authorized by acts of the legislature or by the people through initiative or referendum."

16 gambling bills survived. In 1991, a measure to legalize blackjack (or 21) supported by lawmakers from Eastern Montana failed to pass the Legislature. Since then, except for the successful effort to raise the allowable payout for electronic poker from \$100 to \$800 in 1995*, the vast majority of gambling-related bills have attempted to either constrain gambling activity, mitigate its damaging effects on some people, or resolve issues of effective and efficient regulation. To date almost all of these have failed.

The pattern of recent history reflects in large part conflicts between beneficiaries of the gambling industry (stakeholders) and people and organizations that are morally opposed to gambling. The stakeholders include the owners and operators of gambling establishments; the owners of gambling machines; the employees of bars, taverns, minicasinios, and other businesses associated with gambling, including suppliers of goods and services, all of whom gain financially from legal gambling activity; as well as state and local governments, both of which derive tax revenues from the industry. Vocal and active opponents of gambling include relatively small groups clustered around general concerns for public morality and safety and particular concerns for persons, families, and communities that suffer the results of compulsive gambling and the damaging behavior that sometimes accompanies it. Sandwiched between gambling enthusiasts and detractors are state legislators trying to make policy decisions and state regulators with the multifaceted task of administering an effective system of licensure and taxation.

Notably absent from the legislative arena is any large-scale agglomeration of Montana citizens who are also, as the study results show, the overwhelming majority of gambling consumers in the state. The study did not attempt to measure the tastes or desires of Montana gamblers, and no one was asked why they play video gambling machines, purchase lottery tickets, or place bets at the card table or race track. Governor Marc Racicot's pragmatic position on gambling, articulated at a symposium at the Burton K. Wheeler Center in Bozeman in 1997, may or may not reflect the general tenor of

* House Bill No. 527 (Chapter 227, Laws of 1995).

citizen attitudes toward gambling, but it signifies a stance that is neither strident nor neutral:

I have never been an advocate of commercial gambling, and I remain opposed to its expansion in Montana I also understand that gambling has a positive side--it reflects our natural urge to take risks and escape to the world of make-believe. It fulfills the play impulse that human beings have, and for many, it is a means of social interaction and a way to simply have fun. It is also, of course, an industry that employs many people and pays many taxes.²

Genesis and Purpose of the Study. Much of the ongoing debate about gambling has been conducted on the basis of well-reasoned rhetoric on all sides, seasoned with illustrative anecdotal evidence about the social costs and the economic benefits of gambling. Without disregarding the general relevance and the interesting results of scientific studies undertaken in other parts of the country (and, increasingly, around the world), none of them has been sufficiently useful to replace similarly sound analysis done in and for Montana. Our "galaxy" is unique within the gambling universe, and the constellation of forces at play cannot be properly mapped and traced without an examination that is thorough, rigorous, and focused.

House Bill No. 615 (Chapter 494, Laws of 1997) was passed in the eleventh hour of the 55th Legislative Session and represents a compromise between pro- and anti-gambling interests. The bill mandated a comprehensive study of the social and economic impacts of gambling in Montana and established a five-member, governor-appointed Gambling Study Commission to obtain such a study and examine its results. The Legislature appropriated \$100,000 from the state lottery's unclaimed prizes account to administer and pay for the study.

HB 615 contained a list of items of particular interest to the Legislature;^{*} however, the language in the bill is permissive, allowing both for a reduced or

^{*} See text of bill at Appendix 1.

an expanded search for knowledge. The Commission's Request for Proposals (RFP) included this general statement about the purpose of the study:

The Montana Legislature, the Governor, tribal leaders, dozens of governmental agencies and nongovernmental organizations, Montana citizens at large: all have a compelling interest in obtaining accurate measures of the net benefits and total costs of legalized gambling, and in attaining a better understanding of the role gambling plays in the process of economic development. The Commission members acknowledge the difficulties inherent in combining and quantifying the economic and social aspects of gambling, and doing so within a limited time frame and a fixed monetary appropriation. Nevertheless, the Commission's overall goal is to obtain a study of gambling in Montana that is not only accurate and comprehensive, but also conducive to a holistic interpretation that will help policy makers make well-informed decisions.

Processes and Procedures. Governor Racicot announced his choice of Commission members on September 3, 1997. In accordance with selection criteria specified in HB 615, the appointees were Ms. Phoebe Williams (a business owner with no economic interest in the gambling industry), Ms. Barbara Nemecek (who holds a doctorate in a social science discipline pertinent to socioeconomic analysis), Professor Rodney Brod (representing the Department of Sociology at the University of Montana), Professor Shannon Taylor (from the School of Business at Montana State University), and Dr. Robert Caldwell (a mental health professional).*

To fulfill HB 615's requirement that the Commission "request" and "fund" a detailed study, a formal RFP was issued on October 14, 1997, to approximately 30 parties who identified themselves as interested in preparing a bid. Six proposals were submitted by the December 8 due date. On December 11, the Commission met at the State Capitol in Helena to evaluate the proposals and score them in accordance with the criteria set forth in the RFP. Points were awarded in the following scoring categories: methodology; organizational makeup and access to resources; experience (including work with/for legislative

* Appendix 2 has more complete biographical information on the Commission members.

bodies); staff qualifications; the relevant characteristics of former clients and the quality of work samples; and the fee proposal.³

Four of the proposals (one each from research teams at the University of Idaho, the University of South Dakota, the University of Illinois, and the Economics Resource Group in Cambridge, Massachusetts) were judged to be incomplete in one or several of these categories. The remaining two proposals, from Hunter Interests, Inc., in Annapolis, Maryland and from a joint venture including the Montana Bureau of Business and Economic Research at the University of Montana (MBBER) and Gemini Research in Northampton, Massachusetts, achieved equal total scores. This situation triggered an additional, final stage of competition, wherein both the Maryland and Montana study teams made detailed oral presentations to the Commission on December 18. The contract was awarded that day to the group headed by Dr. Paul Polzin, Director of the MBBER.

The Commission subsequently held meetings in Missoula on January 6, February 24, April 17, and July 20, primarily to get progress reports from the study team. Public input was welcomed on each occasion. Both the Commission members and the contract team received constructive suggestions from members of the industry (owners and operators as well as unionized workers), groups opposed to gambling, and the state lottery. In addition, in February the Commission invited Dr. Phil Brooks, the State Economist at the Department of Labor and Industry, to make a presentation entitled *The Strengths and Pitfalls of Economic Multipliers*, and also heard Missoula County Attorney Dusty Deshamps discuss the potential for additional research on the incidence of gambling-related crime utilizing an informal statewide or regional survey of probation and parole officers.

The Commission and the study team made several important modifications to the original proposal after reconsidering the efficiency and efficacy of various data-gathering techniques. For example, the Commissioners wanted to know more about the structure of the industry, especially with regard to the concentration of ownership and to out-of-state ownership of gambling vendor (route operator) licenses and thereby the flow of earnings or revenue "leakage"

to external jurisdictions. Another important change was made in the pursuit of information on problem and pathological gambling, resulting in an innovative approach to collecting and compiling information from medical records at treatment centers and volunteered by self-selected members of Gamblers Anonymous.*

Throughout the study period, the Commissioners also relied on their own combined expertise in social science, business, and mental health. Staff provided research assistance and printed materials gathered from diverse sources, including studies undertaken in other states, statistical information from the Montana Department of Justice's Gambling Control Division, and publications from the Institute for the Study of Gambling and Commercial Gaming in Nevada.

Caveat. During the course of the study period, members of the Commission repeatedly articulated their goals in the succinct terms of cost-benefit analysis. What is gambling worth to Montana? What does it cost the state? If the study could produce good, solid answers to both questions, the Commission would be in a position to declare the "net value" of gambling in the Treasure State.

Unfortunately, and notwithstanding sterling effort within a limited budget,** some of the important questions that underlie the overarching ones above are not amenable to scientifically valid research methods. Social cost accounting is a fledgling science. It is difficult to quantify and aggregate what are often intensely personal and inherently private stories about financial difficulties, family dysfunctions, and compulsive behavior. Noted gambling expert William Eadington comments frequently on this conundrum. Here's a sampling of his views:

One of the fundamental realities regarding economic and social impacts associated with gambling is that economic impacts,

* See Appendix D in the Technical Appendix for a more complete description of this technique.

** Less comprehensive studies have cost \$500,000 and more in other states; the National Gambling Impact Study Commission has a budget of \$5 million.

which tend to be positive, are quantifiable, tangible, and measurable; whereas social impacts, which tend to be negative, are qualitative, elusive, and very difficult to measure.⁴

Problem gambling poses challenges of identification, definition and measurement. It is largely an invisible activity, especially in comparison to alcoholism or drug addiction Thus, measuring the prevalence of problem or pathological gambling, and associating costs to individuals or society from such behavior, poses nearly insurmountable methodological difficulties to investigators.⁵

With this highly substantive procedural hurdle very much in mind, the Commission members did take a look at a number of studies that at least purport to have achieved solid calculations of problem gambling based on methodologically sound measures and techniques.⁶ More generally, the Commission and staff reviewed reports of gambling studies from a number of other states, including North and South Dakota, Wisconsin, Minnesota, Oregon, Illinois, Louisiana, Connecticut, Florida, and California. Some addressed economic considerations solely; others focused exclusively on problem gambling and other social cost dimensions. Relatively few attempted as comprehensive an analysis as requested in HB 615. The main conclusion that we can draw from this effort is that gambling is a diverse enough activity and industry in the U.S. and elsewhere to render scientifically valid comparisons iffy at best.

Moreover, even fairly routine measures of economic impact are expensive and susceptible to divergent interpretations. There is no consensus on how best to measure the entertainment value of gambling, let alone the multiplier effects of investments and consumer expenditures in the gambling industry. As Dr. Brooks pointed out, multipliers are imprecise, they tend to be overstated, and it is not uncommon for groups with a stake in the sector(s) undergoing analysis to "shop" for an economist who is prepared to use a model that will produce the desired result.⁷ One particularly serious obstacle to systematic assessment of economic impacts results from Standardized Industrial Classification categories ("SIC codes") that do not distinguish gambling from other types of entertainment and recreation. This effectively prevents the application of standard input-output models that are used to measure the direct and induced effects of any primary activity, since without extensive and customized data

crunching, there is no way to separate gambling-related expenditures from other types of spending within the same statistical category.⁸

The solidity of the Commission's "bottom line" conclusion is ultimately contingent on the quality of the contractor's research, which in turn depends to a large extent on the quality and availability of quantitative information. There is a shortage of reliable data on the gambling industry in Montana from which to draw policy-relevant conclusions and upon which to base statistical measures such as those requested in HB 615.

This is a general warning to the reader; more specific caveats are spelled out in the body of the Final Report narrative and in the methodology sections of the Technical Report.

Selective Summary of Findings. The Final Report includes an Executive Summary and, of course, a detailed accounting of what the contract team found and how they conducted the study. The following conclusions are the Commission members' own and are highlighted here to provide a rational basis for the policy implications and legislative options outlined below.

- ▶ In 1997, 78% of Montanans gambled in some form (including raffles as well as casino games), up from 74% in 1992. They wagered* \$239 million, 94% of it on video poker and keno machines.
- ▶ Montana gamblers are equally likely to be male or female. Most are 18-29 or 40-49 years old, married, high school graduates, employed, earning above-average incomes.
- ▶ Nonresidents spent an estimated \$10 million on gambling in 1997, about 4.5% of all money wagered.

* The money remaining at gambling establishments after winnings are paid out.

- ▶ About 3.6% of all Montanans are probable problem or pathological gamblers, up from 2.2% in 1992. For American Indians in Montana, the current rate is 8.5%.
- ▶ Problem and pathological gamblers wager a disproportionate amount of the total: 37% of video gambling machine revenue, 29% of live keno, 18% of scratch tickets, 17% of other lottery games, and 13% of live bingo.
- ▶ The 1,740 establishments that offer gambling reported gross revenue for 1997 of \$923 million. Gambling's share of the gross ranges from 62% for casinos with 20 machines to 5% for establishments with 1 to 5 machines.
- ▶ 93% of gambling establishments hold alcohol licenses. Under state law, only residents may obtain a license to sell alcoholic beverages, so most gambling establishments are owned and operated by Montana citizens. Vendors, also known as route operators, provide about 66% of the video gambling machines (VGMs) in Montana. Four vendors are owned completely by nonresidents (one of whom has over 800 VGMs in the state); an additional seven vendors are partially owned by nonresidents.
- ▶ Gambling establishments spent a total of \$795 million in 1997 to buy goods for resale, as well as for payroll, video gambling machine rent, taxes, advertising, interest, and other expenses. The balance of \$128 million (the difference between gross revenue and expenditures) yields an average "net margin" of 13.8%.
- ▶ Gambling establishments of all types employ in total approximately 16,300 workers (4.6% of the state labor force), about 10,000 of whom work face-to-face with gamblers. On average, each worker puts in 30 hours per week and makes \$9,600 per year (not counting benefits and tips).

- ▶ In fiscal year 1997, gambling paid a total of \$47.3 million in direct taxes: \$24.3 million to local governments, \$17.9 million to the state's general fund (about 1.8% of total general fund revenue), and \$5.1 million to regulatory agencies.
 - ▶ Cities and counties have grown to rely on gambling tax revenue, which accounts for an average of 13.9% of cities' funds and 1.5% of counties' funds. Some local governments are far more dependent: Kalispell, Hamilton, Libby, Bridger, and Superior get from 23% to 39% of their revenue from gambling taxes; Anaconda/Deer Lodge, Butte/Silver Bow, Lincoln, and Mineral counties receive from 4% to 10%.
 - ▶ Increased gambling is statistically correlated with increases in six types of crime: burglary, larceny/theft, robbery, vandalism, DUIs, and weapons offenses. For each additional \$1 million in gambling, about 172 more of those crimes will occur. There is no statistical correlation between increased gambling and increases in embezzlement, check fraud, or forgery.
 - ▶ Problem and pathological gamblers informally admit a very high incidence of illegal acts. Some, like check fraud, directly support their gambling.
 - ▶ Problem and pathological gamblers informally report very high rates of divorce, bankruptcy, credit problems, domestic violence, drug and alcohol dependence, depression, and suicide attempts.
 - ▶ An estimated 3% to 6% of problem and pathological gamblers will eventually seek treatment. Projected costs are \$9,485 per person for inpatient treatment and \$1,600 per person for outpatient care.
-

AT THIS JUNCTURE, THE READER MAY PREFER TO SKIP AHEAD TO THE STUDY TEAM'S NARRATIVE FINAL REPORT BEFORE TAKING IN THE COMMISSION'S CONSIDERATION OF SOME OF THE IMPLICATIONS FOR PUBLIC POLICY CONTAINED IN THE REPORT'S FINDINGS.

Policy Implications. HB 615 imposes a duty on the Commission to evaluate and publicize the study results. The bill also permits the Commission to recommend legislation, but does not require such action. Do any or all of the findings warrant changes in state policy or specific legislative action? Are the results surprising? Do we know a lot more about the social and economic impacts of gambling than we did before the study was commissioned? As an appointed body with no direct stake in the outcome of this endeavor, we cannot answer these questions with confidence, let alone certainty.

Some of the findings are counterintuitive. For example, many people associate gambling activity with crime. It is a common assumption--and not just in Montana, but across the country and beyond the United States, we surmise--that casino-style gambling is tainted by vestiges of organized crime or is otherwise a cause for a variety of financial woes and domestic violence. A number of recent studies indicate that the criminal element has been largely eradicated from gambling operations as a result of regulation and the evolution of the industry, which is now dominated nationally by publicly traded corporations subject to the same type of scrutiny as other types of businesses. Our study did not examine this dimension, but it does show that the connections between criminal activity and the availability of gambling are significant in only a small number of types of crimes.⁹

Another common assumption, that popular forms of gambling are primarily an activity of persons with less-than-average education and income levels, was not borne out in Montana. Moreover, studies elsewhere have produced similar results.¹⁰

Some of the findings are suggestive. If indeed over a third of the expenditures on video gambling machines and nearly a quarter of those on the lottery are made by citizens with a gambling problem, and considering that local

governments rely quite significantly on the tax revenue collected as a consequence of their play, then the resulting situation might be characterized as predatory, even by Montanans who are supportive of or indifferent toward gambling. This negative conclusion is especially likely when there are no institutionalized programs provided by the state for the relief or rehabilitation of problem and pathological gamblers.

The study shows an increase (since 1992) in the percentage of problem and pathological gamblers in Montana. It does not explain why. One of the measuring tools used by our study team, the Diagnostic and Statistical Manual for Mental Disorders, specifically notes that greater exposure to gambling can trigger the onset of pathological behavior.¹¹ Credible studies in other states--Minnesota, Iowa, Louisiana--assert a causal link between the availability of gambling opportunities and the number of problem gamblers. Credible studies in other states--South Dakota, Oregon, Connecticut--show no such correlation. As Rachel Volberg explains,

There is clear evidence that prevalence rates of problem gambling have risen significantly over time. However, the nature of the links between the availability of specific types of gambling and the prevalence of gambling problems in the general population is not well understood. A further complication is the differential availability of services for problem gamblers in jurisdictions where new types of gambling have recently been legalized.¹²

Has the number and distribution of opportunities to gamble grown since 1992? The Gambling Control Division's most recently published statistics show that in 1992 a total of 14,365 video gambling machine permits were issued, compared with 18,587 in 1996.* In 1997 there were 19,487. Clearly, the odds of encountering a VGM in Montana have improved in recent years, but that fact alone does not establish a cause and effect relationship. It is interesting to note, in any event, that there were 300 fewer machine permits as of June 1998 than a year earlier, while the tax revenue generated was up

*The total includes video poker, keno, and bingo machines.

by a projected 9.3%. Apparently, fewer machines are being played more intensively, but we don't know by whom.¹³

Some of the findings are simply incomplete. For example, a determination of the percentage of video gambling machines owned by just two route operators (one of whom resides in Montana, the other in a different state) could not be made because the Gambling Control Division declined requests to provide the information on the basis of its reading of a nondisclosure statute (see 23-5-116, MCA). Thus the concentration of ownership of VGMs cannot be measured in detail unless someone with legal standing tests the constitutionality of the privacy protection provision or the Legislature simply changes the law to explicitly allow the Division to release data to public entities such as the Gambling Study Commission.¹⁴

Another missing element is an accurate or verifiable positive multiplier effect of investments and expenditures by gambling businesses, and conversely any treatment of the substitution (or displacement) effects that gambling enterprises may have on local economies. As noted above, the application of an accurate multiplier is tricky. With regard to substitution, critics such as Robert Goodman and Earl Grinols assert that gambling "cannibalizes" local restaurants and entertainment centers as well as diverting dollars from all sorts of other retail shops and service sector enterprises.¹⁵ While the structure of the gambling industry in Montana would suggest that these effects do occur, in some degree, this aspect of economic analysis fell outside the practicable scope of the study.

For purposes of general discussion, the Commission acknowledges the recurrent controversies that surround policymakers in their attempt to make decisions about the structure, scale, and scope of legalized gambling in relation to its economic and social consequences. As state law makes clear, gambling has the status of privilege rather than right in Montana.* Policy decisions in this arena, where a formerly prohibited activity now enjoys a privileged status that is unlike most other market commodities,¹⁶ are inherently double-edged.

*See 23-5-110(2), MCA.

The Legislature has the legal authority to constrain or even outlaw gambling, but not without first considering and acting upon its cumulative obligations to stakeholders after more than a decade of vesting in them privileges that are tantamount to property rights. Moreover, the Legislature must take into account the financial needs and expectations of local governments and the broader ramifications of any policy-induced decline in gambling activity and consequent revenue.

This study provides an opportunity to reflect on the fact that Montana is an anomaly in some respects and consequently faces policy challenges that are not common across the states. Video poker machines were made legal in Montana in 1985. The primary rationale for this decision was to breathe new life into rural and urban bars and taverns whose financial picture was bad and getting worse, partly as a consequence of a lingering recession. The travails of the tavern industry were viewed as a barometer of economic conditions, since such establishments were (and perhaps always have been) a vital component of local economies and community life. The loss of federal revenue sharing under the Reagan Administration added impetus to government's interest in gambling as a revenue source.

Unlike states that have authorized urban casinos and river boat/dockside gambling in recent years, Montana has treated gambling not so much as a tool of economic expansion but as a means of economic sustenance. Outside of a few tribal facilities, such as the Kwatuknuk and Big Horn casinos on the Flathead and Crow Reservations, respectively, there are no genuine destination resorts in Montana that rely heavily on gambling to attract customers. The state does not promote itself as a place to gamble; the industry has not been considered by state and local officials (as distinct from tribal leaders) as an engine of growth and diversification.

The property tax restrictions on local governments that were imposed through a voter's initiative in 1986 offer another case in point. This measure--Initiative No. 105--was passed without regard to gambling, but it has in effect increased significantly the degree to which cities and counties rely on gambling revenue to sustain basic operations of government. While government is often regarded

as the "silent partner" in legalized gambling across the country, local government officials and advocates in Montana have been extraordinarily vocal and candid about the importance of gambling revenue. As the Executive Director of the Montana League of Cities and Towns put it in 1995, "Gambling Revenue is the difference between a balanced budget and a catastrophe for every city and town in the state of Montana."¹⁷

The Commission further recognizes that while Montana may be a unique economic and social environment in some respects, this study is one of many across the country and crosscurrents of interest, opinion, and inquiry in the gambling arena outside this state affect the way gambling is conducted and perceived inside its borders. National and regional trends in gambling policy do have bearing and influence here.¹⁸ For example, recent analysis of such trends indicates that the increasing spread of legalized gambling across North America is characterized by (1) the declining payoff from new forms of gambling for private firms, for economic development initiatives, and for most state and local governments, and (2) increased pressure on state revenue and private sector earnings derived from older forms of gambling such as parimutuel horse racing and traditional lotteries.¹⁹

In other words, market forces are at work. An increased supply of new gambling opportunities is reducing the demand for older types, and the spread of legalized gambling across the continent is also reducing the need for anyone to travel across state and provincial lines to partake of this form of entertainment. As a recent report summarizes:

*In the early days of gambling legalization, decisions to legalize casinos and to establish lotteries drew substantial business from non-residents. As gambling spread, the ability of states to offer unique experiences has dropped. So larger and larger portions of customers are local residents.*²⁰

The economic consequences of localized gambling are less alluring than those associated with or resulting from successful campaigns to entice outsiders to spend their disposable income in Montana establishments. University of Nevada professor William N. Thompson and other gambling specialists

repeatedly assert that the local economy does not incur net benefits if only local people are gambling.²¹ As a California study puts it, "Building and running a gambling facility doesn't create wealth, it merely transfers it. The benefit for a region is if the transfers are from outside the region."²² Our study's finding that nonresidents account for less than 5% of the money wagered in Montana indicates that gambling is redistributing income in the state rather than adding much to it.

This is not to say that gambling cannot be considered a means of boosting the state's economy. An expansion of gambling would likely increase the industry's economic impacts--by "growing" jobs and tax revenue, for example--and it would also likely add to the downside social effects, however difficult these may be to quantify with any exactitude. In any event, it is worthwhile noting William Eadington's studied observation that a jurisdiction with widely dispersed gambling opportunities (such as Montana) rather than gambling at destination resorts or in large urban casinos has the least to gain in terms of genuine economic development and the weakest set of policy tools to address gambling problems.²³

In sum, the choices available to policymakers are different in a "maturing" market than in a fresh one, but it is still exceedingly difficult to get an accurate reading of just where Montana is or can go in the gambling universe.

In partial fulfillment of the evaluation and publicity obligation under HB 615, the Commission scheduled a public hearing on the study results in the State Capitol Building in Helena on September 30, 1998. Legislators, the Governor, the media, and other interested persons were invited to attend the hearing, which consisted of a joint presentation of the study findings and a moderated discussion of the resulting opportunities and problems that might be addressed by changes in state law and policy. In lieu of explicit legislative recommendations, the Commissioners opted to invite all interested parties to review the study and to analyze independently any segment or the total sum of the data compiled during the study period.

Legislative Options. Without venturing into advocacy or resistance to any specific policy option, the Commission observes there are a number of possibilities, such as the following:

- ◆ The Legislature could decide to do nothing (or nothing much) at all about gambling. It could simply leave things as they are, acknowledging the fact that the status quo regime for gambling does have economic and social impacts, some of which are obvious, some of which are not. Gambling and gambling taxes have been institutionalized in Montana, as in most states.
- ◆ The Legislature could recommend (by resolution) or mandate (through legislation) the systematic gathering and compiling of policy-relevant data on gambling. This would aid future attempts to conduct a thorough economic and social impact analysis; it would also cost money and might require changes in statute concerning information disclosure by the Gambling Control Division.
- ◆ To achieve potentially improved economic benefits and reduced social costs, the Legislature could allow new games, such as blackjack (a.k.a. 21) at destination resorts, disallow existing games--video poker--to offer a radical example, or change the allowable mix of games on certain premises, such as the placement of video poker and/or keno at racetracks. Iowa, Delaware, West Virginia, Rhode Island, Louisiana, and New Mexico now permit slot machines or other electronic gaming devices at horse racing facilities.²⁴ Another option would be to allow riverboat/dockside gambling on the Missouri, Yellowstone, or Clark Fork Rivers. Iowa, Illinois, Louisiana, Missouri, Mississippi, and Indiana have all gone this route since 1989, with mixed results.* Each of these

*The rationale for permitting riverboat casinos--and at first allowing gambling to take place only when the boats were afloat and not tied to any dock--was that the social damages that might result from the enterprise would be mitigated. William Eadington and others observe that there is no desire on the part of riverboat casino customers and operators to sail and that the primary results of restrictions are inconvenienced gamblers and higher costs for casino operations.

measures would bring different effects, which in all cases would be difficult to ascertain in advance with any precision.

- ◆ The Legislature could reduce the availability of gambling opportunities directly by placing tighter limits on the number of video gambling machines on any licensed premise or by restricting the types of gambling allowed in certain types of establishments or could achieve a similar goal indirectly by restricting consumers' access to cash through prohibiting the placement of automated teller machines in close proximity to gambling activity.*
- ◆ The Legislature could change the tax rates on gambling activities in Montana. As in any instance of tax policy, raising rates would have divergent effects. It could increase revenue accruing to state and local government, decrease the return on investment to machine and establishment owners, increase the level of dependence that governments have already on a particular source of revenue, or result in income and/or job losses in an important retail sector of the economy. Higher taxes might deter entrepreneurs from entering the gambling arena and thus either increase or maintain the current level of concentration of ownership or lead to a decrease in overall gambling activity or both.²⁵
- ◆ To address problem and/or pathological gambling, the Legislature could mandate state (i.e., tax-supported) funding for treatment.** It could require that problem and pathological gambling be included as a condition that would meet the qualifications of the state's mental health programs. It could compel licensees and/or the state lottery to pay for treatment and rehabilitation programs. It could encourage or provide incentives for an interdiction program to minimize the opportunity for problem gamblers to frequent public establishments.

*A 1997 bill to achieve this goal, House Bill No. 349, was tabled in committee and failed an attempt to remove it to the House floor for second reading.

**Senate Bill No. 208, a bill to establish a pathological gambling treatment program and a problem gambling prevention program, died in the Appropriations Committee in the 1997 Legislative Session.

(This might have the likely but unintended consequence of driving problem gamblers underground, into noncomplying establishments, or quite literally, into their basements.)

- ◆ The Legislature could alter the parameters of jurisdictional power. Under current state law (see 23-5-171, MCA), a local government has the ability to restrict gambling within its borders. No Montana community has yet made use of these provisions to prohibit gambling altogether (generally or of a specific type) within their legal boundaries. Legislation to strengthen local governments' "hand" could be recommended as a means of providing citizens more choice in the matter. This could lead to litigation over constitutional takings issues, unless the new measures provided a fair means of dealing current operators out of the game.
- ◆ The Legislature could put the state lottery out of business.* A less draconian measure would be to restrict its advertising, either by placing limits on allowable expenditures and/or requiring certain disclosures that enhance the consumers' ability to make an informed choice. (Six states place statutory spending limits on advertising, while 14 impose conditions on the content of advertisements.)²⁶ Conversely, the Legislature could allocate more money to the lottery to promote public participation and to bring new games into the picture. Another way to tinker with the lottery--and with gambling taxes as well--is to redistribute or re-earmark the revenue for some specific educational or other social purpose.** A number of other states, for example, require lottery earnings to go toward K-12 education.²⁷

This is by no means an exhaustive list of possibilities, and none of these general considerations is unique to Montana's situation or policy horizon;

* A 1997 bill to abolish the state lottery, Senate Bill No. 268, died on second reading in the Senate. A subsequent initiative campaign to place the lottery on the 1998 ballot failed by a wide margin to garner a sufficient number of signatures.

** The 1995 Legislature severed the link between lottery revenue and school funding in Montana.

indeed, most are probably familiar to Montana lawmakers already, since the legislative history of the past two decades is marked by numerous attempts to change the rules of the game in gambling. It is worth repeating here what was noted above in the introductory section: Many attempts have been made to alter the "landscape" of gambling in Montana since video gambling machines were legalized in 1985. Very few have succeeded. In the 1990s, critics and outright opponents of legalized gambling, with some support from the gambling industry, have tried to win state funding for problem gambling programs, but to no avail. Attempts to increase local authority by allowing greater citizen involvement in gambling licensing procedures, impose certain distance restrictions for casinos, make it a criminal offense for minors to enter or loiter in gambling establishments, and raise the legal gambling age (by a constitutional amendment) from 18 to 21 have also failed, for a variety of reasons, to survive the legislative process. In the meantime, excepting the video poker payout increase in 1995 (after failing in the 1993 Legislative Session), industry participants and their advocates have not brought proposals to further expand gambling.*

The Commission also recognizes that some of the issues raised in HB 615 and addressed in the study fall within the purview of the Gaming Advisory Council (GAC). The Council oversees regulatory issues and as such has an ongoing interest in the efficiency and effectiveness of the means employed by the Justice Department's Gambling Control Division and licensees to assess and collect fees and taxes. In this vein, the GAC may again recommend legislation to establish automated reporting systems to obtain tax data from video gambling machines (often referred to as the "dial-up" system because it utilizes phone lines).

The GAC continues to demonstrate concern about problem gambling and more particularly about what can be done to mitigate the impacts. For example, the Council has supported a toll-free help line (1-888-900-9979) funded and administered by the regulated gambling community. The Council also continues

* In 1995, with support from large segments of the gambling industry, the Legislature passed House Bill No. 537 (Chapter 480, Laws of 1995), which prevented the "stacking" of gambling licenses to achieve greater than the maximum 20 allowed per licensed establishment.

to consider legislative proposals to establish a state treatment/prevention program for problem and pathological gamblers. The Council may also recommend or support actions taken to regulate if not outlaw Internet gambling in Montana, a new venue for gamblers that raises concern among some industry representatives that unregulated competitors may gain a substantial share of the market for consumers' dollars and, more importantly, damage the industry as a whole by acting unscrupulously or illegally. Internet gambling is also a cause for concern among groups opposed to gambling, especially as it relates to the association of fast-paced video signals with mental health disorders.²⁸

Finally, the study process and the results set forth in the study team's report prompted a number of questions that were not asked explicitly in the RFP and that were only partially implied in the itemized issues in HB 615. Among such *ex post facto* queries are the following:

☐ What is the economic and social rationale for linking liquor establishment licenses to gambling licenses? Does the combination create, in effect, an industry sheltered from rigorous competition? Does it have the contradictory consequence of limiting the availability of gambling (perhaps reducing the net potential cost of problem gambling) and, at the same time, making an activity that is addictive to some people ubiquitous in the very places where other addictive substances (alcohol and tobacco) are routinely available? What would be the ramifications of separating the two types of licensure or, more radically, of restricting gambling to places of business that DO NOT sell alcoholic beverages, as is the case in some jurisdictions in North America and elsewhere in the world?

☐ What sort of treatment is available for persons who fit the problem and pathological gambling profile? How much does it cost? Is it effective, and for how long? Who should pay for it? Should state-supported mental health managed care programs include treatment for gambling addiction? Should state-regulated health insurance policies provide coverage for this affliction? If insurers are required to reimburse customers for the treatment of gambling

illnesses, does the state need to provide for the licensure of treatment providers?

□ Gambling is spread far and wide across the Treasure State. There are scores of video gambling machines in relatively large, casino-style eating and drinking establishments located on or near major highways; the same machines (fewer in number) are found in small taverns in relatively remote and seldom visited spots on the map. What would be the costs and benefits of a state policy that encouraged or perhaps compelled the consolidation of gambling activities into a few select locations (non-Indian and Indian) for the purpose of boosting the economic impacts of tourist gambling and reducing the availability of gambling to persons with gambling problems?

These are a few of the areas that this study did not explore, but that probably warrant further research before anyone could claim that the state has obtained a truly "comprehensive" accounting of the socioeconomic effects of gambling in Montana. The study in hand provides an unprecedentedly detailed picture of the status quo situation in Montana, but it does not (and was not intended to) show how things would or could be better or worse under different, prospective scenarios.

Acknowledgments. The study effort benefited from the cooperation of the Montana Tavern Association (including *The Tavern Times*), the Gaming Industry Association, the Montana Coin Machine Operators Association, the Montana Independent Machine Operators Association, and the main antigambling organization in the state, called Don't Gamble with the Future. Melissa Case from the Hotel and Restaurant Employees Union provided the Commission with a paper concerning job quality in the gaming industry. None of these organizations exercised undue influence on the contract team, as all substantive communications between the contractors and interested parties were reported to the Commission via the staff. The Commission also appreciates the informational assistance that it and the contract team received from staff at the Montana Lottery and the Gambling Control Division of the Department of Justice. The cooperation of Rimrock Foundation in Billings and

the Rocky Mountain Treatment Center in Great Falls and from members of several chapters of Gamblers Anonymous was also essential.

Select Source Materials. Specific references are listed in the footnotes and endnotes that follow this section. The books and articles listed below were also helpful to the Commission and staff during the study period and are recommended for their clarity and comprehensiveness.

BOOKS

William R. Eadington and Judy A. Cornelius, editors, **Gambling: Public Policies and the Social Sciences**, Reno: Institute for the Study of Gambling and Commercial Gaming, 1997.

William N. Thompson, **Legalized Gambling**, Santa Barbara: ABC-CLIO, 1994.
Roger Dunstan, **Gambling in California**, Sacramento: Research Bureau, California State Library, 1997.

Harold Vogel, **Entertainment Industry Economics: A Guide for Financial Analysis**, third edition, New York: Cambridge University Press, 1994.

Robert Goodman, **The Luck Business: The Devastating Consequences and Broken Promises of America's Gambling Explosion**, New York: The Free Press, 1995.

John Dombrink and William N. Thompson, **The Last Resort: Success and Failure in Campaigns for Casinos**, Reno and Las Vegas: University of Nevada Press, 1990.

REPORTS

Rachel Volberg, *Gambling and Problem Gambling in Colorado*: Report to the Colorado Department of Revenue, August 28, 1997.

William N. Thompson, Ricardo Gazel, and Dan Rickman, *The Social Costs of Gambling in Wisconsin*, Thiensville, WI: Wisconsin Policy Research Institute, Inc., July 1996.

WEFA Group, *A Study Concerning the Effects of Legalized Gambling on the Citizens of the State of Connecticut*, prepared for the Connecticut Department of Revenue Services, 1997.

New Jersey Casino Control Commission, *Casino Gambling in New Jersey: A Report to the National Gambling Impact Study Commission*, January 1998.

Hunter Interests, Inc., *Market Potential and Economic Impacts of Casino Gaming in Baltimore, Maryland*, prepared for the Greater Baltimore Committee, Annapolis, May 1996.

Franke Wilmer, *Indian Gaming: Players and Stakes*, Bozeman: Local Government Center, Montana State University, 1994.

United States Government Accounting Office, *Tax Policy: A Profile of the Indian Gaming Industry*, GAO/GGD-97-91, May 1997.

United States Government Accounting Office, *Casino Gaming Regulation: Roles of Five States and the National Indian Gaming Commission*, GAO/RCED-98-97, May 1998.

The Report of the Independent Study Committee on Gambling in Oregon, March 12, 1997.

Minnesota Planning, *High Stakes: Gambling in Minnesota*, 1992 and *Minnesota Gambling*, 1993.

Arthur Andersen Inc., *Economic Impacts of Casino Gaming in the United States*, Volume 1: Macro Study (December 1996), and Volume 2: Micro Study (May 1997), prepared for the American Gaming Association.

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ENDNOTES

1. Chapter 13, Laws of 1997, established a licensure requirement for sports tab sellers; Chapter 252 revised the prohibition of credit gambling; Chapter 354 allowed for the regulated sale and importation (for maintenance, manufacturing, and repair) of gambling devices not otherwise authorized for use in Montana; Chapter 465 prohibited holders of a new type of beer and wine license from also obtaining gambling licences; Chapter 494 established the Gambling Study Commission.
2. Governor Racicot's September 4, 1997, speech at the Wheeler Center on the Montana State University-Bozeman campus can be found in its entirety at <http://www.mt.governor>.
3. While conflict of interest considerations were not part of the scoring criteria, they were an important part of the RFP and remained significant for the duration of the study contract. The Commission required all the proposals to contain signed statements verifying that the persons directly involved in the study were not already engaged in work for or against gambling industry interests and would not become so during the contract period, which lasted from January 1 to October 2, 1998.
4. William R. Eadington, *The Spread of Casinos and Their Role in Tourism Development*, unpublished manuscript received August 21, 1998, forthcoming in *Contemporary Issues in Tourism Development*, edited by Douglas G. Pearce and Richard W. Butler, London and New York: Routledge.
5. William R. Eadington, *Contributions of Casino-Style Gambling to Local Economies*, *The Annals of the American Academy of Political and Social Science*, Special Issue - *Gambling: Socioeconomic Impacts & Public Policy*, James Fray, editor, Volume 556, March 1998, p. 59.
6. Examples include: Robert Goodman, *Legalized Gambling as a Strategy for Economic Development*, Northampton, Mass.: **United States Gambling Study**, March 1994; Rachel Volberg, *Gambling and Problem Gambling in Iowa: A Replication Survey*, Report to the Iowa Department of Human Services, 1995; H.R. Lesieur, *Compulsive Gambling, Society*, 1992; Office of Planning and Budgeting, Executive Office of the Governor, *Casinos in Florida: An Analysis of the Economic and Social Impacts*, 1995.
7. Dr. Phil Brooks, presentation to the Gambling Study Commission, February 24, 1998.
8. For example, Florida analysts employed the U.S. Department of Commerce, Bureau of Economic Analysis regional input-output modeling system (RIMS II) to calculate the economic impacts of casinos, but their study was undertaken in advance of proposed legalization of casinos. Interestingly, the Florida study concluded that the state had more to lose than gain from casino gambling, largely on the basis of comparing projected gambling tax revenues to social costs as well as a determination that market saturation would prevent the successful export of the gambling product and gambling problems to other areas. See citation at endnote #6.
9. In June 1998, a research team from the University of Nevada-Reno was awarded a \$250,000 grant from the National Institute of Justice to examine the impact of casino gambling on crime and the quality of life in U.S. jurisdictions where the industry is relatively new. For more information, contact Carmen Jeschke at (702) 784-1580.

10. According to a study provided to the Commission by Hunter Interests, Inc., data showing that lower-income people spend a higher percentage of their income on gambling is mainly from studies on the impact of lotteries. See C.T. Clutfelder and P.J. Cook, *Selling Hope: State Lotteries in America*, Cambridge, Massachusetts: Harvard University Press, 1989.
11. American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, Washington, D.C.: American Psychiatric Association, 1992, p. 617.
12. Private communication dated September 16, 1998. Volberg cites H.J. Shaffer, M.N. Hall, and J. Vanderbilt, *Estimating the Prevalence of Disordered Gambling Behavior in the United States and Canada: A Meta-analysis*, Boston: Harvard Medical School Division on Addictions, 1997.
13. Bob Anez, *Gambling Revenues on Record-Setting Pace*, *Helena Independent Record*, June 11, 1998.
14. An article entitled *Chancey Revenues* by Stanley Nicholson and Marlene Nesary in the Winter 1995 issue of *Montana Business Quarterly* goes further with available data than this study did in discussing the economic implications of a highly concentrated industry. The authors did acknowledge, however, that their analysis lacked the benefit of information concerning the in-state business expenditures of gambling establishments. Neither the MBQ article nor the current study contain information on the number of employees or the amount of expenditures of route operators.
15. Robert Goodman, *op. cit.*, and Earl Grinols, *Bluff or Winning Hand? Riverboat Gambling and Regional Employment and Unemployment*, *Illinois Business Review*, Spring 1994, pp. 8-9.
16. William Eadington is particularly helpful in understanding the economics of legalized gambling, as is evidenced by the following passage: "*Wealth is also created by the legislative process in the form of economic rents when stakeholders are given claims on future income flows that will accrue to purveyors of a newly introduced commodity. With gambling, this process can be significant as long as the activity is accorded some form of supply-constrained, privileged status. Privileged status is an inevitable byproduct of moving from prohibition to controlled legalization. Constraints on supply are usually implemented because policy makers and the general public remain skeptical about the potential costs of creating an unconstrained or laissez-faire marketplace for gambling products, or are themselves directly interested in capturing or allocating the economic rents. As a result, the political process for changing the legal status of gambling is often dominated by rent seeking behavior of stakeholders, manifested in lobbying efforts or referenda, rather than by a ground swell from consumer groups pushing for legalization to satisfy their demands or improve their access to preferred forms of gambling.*" Eadington, *op. cit.* (1998), p. 56.
17. Alec Hansen, quoted in an article by Kathleen McLaughlin entitled *Economic Cocaine: Local governments addicted to video gaming revenues*, published in the *Helena Independent Record*, July 16, 1995.
18. The U.S. Congress established the National Gambling Impact Study Commission in 1996 to conduct a comprehensive legal and factual study of the social and economic impacts of gambling on federal, state, local, and tribal governments and on communities and social institutions. None of the Commission's findings are scheduled for publication and dissemination until 1999. For updates and other information, telephone the NGISC at (202) 523-8217 or visit the website at <http://ngisc.gov>
19. *State Policy Reports*, Volume 16, Issue 13, 1998, p. 7.
20. *State Policy Reports*, Volume 16, Issue 7, 1998, p. 6.

21. Thompson quoted in *Casinos in Florida: An Analysis of the Economic and Social Impacts*, Tallahassee: Governor's Office of Planning and Budgeting, 1995, p. 79.
22. Roger Dunstan, *Gambling in California*, California Research Bureau, California State Library, January 1997, p. IX-2. Dunstan's remark recalls an often-quoted statement from a 1970 textbook, *Economics*, by Nobel Laureate Paul Samuelson: "[Gambling] involves simply sterile transfers of money or goods between individuals, creating no new money or goods. Although it creates no output, gambling does nevertheless absorb time and resources. When pursued beyond the limits of recreation, where the main purpose after all is to 'kill' time, gambling subtracts from the national income." (p. 402) Samuelson probably did not enjoy hiking or playing baseball--or going to Las Vegas.
23. Eadington, *op. cit.* (1998), p. 62.
24. William Eadington, *op. cit.* (1998), p. 63.
25. A 1994 article by Phillip Longman entitled *The Tax Mirage* in the *Florida Trend* cites research demonstrating that any increase in casino taxes beyond 20% has been shown to decrease demand and resulting revenue, and that jurisdictions that tax video lottery terminals at 30% do not collect more revenue than those with a 15% rate.
26. See LaFleur's Lottery World feature article (2/98), found at <http://www.lafleurs.com>.
27. See Arturo Perez, *Earmarking State Lottery Profits*, NCSL Legisbrief 3, No. 25, June/July 1995.
28. Individuals with a predisposition to compulsive behavior are thought to be especially susceptible to continuous, rapid-cycle forms of electronic stimuli, such as video gambling machines. See Rachel Volberg and Eric Silver, *Gambling and Problem Gambling in North Dakota*, Report to the North Dakota Department of Human Services Division of Mental Health, 1993. Also, the June 1998 issue of *CNS Spectrums* (Volume 3, No. 6) contains a number of research articles on the biological and genetic determinants of pathological gambling.

APPENDIX 1

HOUSE BILL NO. 615
INTRODUCED BY COBB, GROSFIELD

A BILL FOR AN ACT ENTITLED: AN ACT ESTABLISHING AN INTERIM COMMISSION TO OVERSEE, PUBLICIZE, AND REPORT ON A STUDY OF THE SOCIOECONOMIC IMPACTS OF GAMBLING IN MONTANA; PROVIDING AN APPROPRIATION; AMENDING SECTION 23-7-402, MCA; AND PROVIDING AN EFFECTIVE DATE AND A TERMINATION DATE.

WHEREAS, The Constitution of the State of Montana provides for the legalization of gambling through a vote of the people or the action of the Legislature; and

WHEREAS, there is a public policy statement in state law concerning gambling activities that includes the creation and maintenance of a regulatory climate; and

WHEREAS, state and local governments receive tax revenues generated by gambling; and

WHEREAS, there are citizens who are adversely affected by legalized gambling, including compulsive gamblers and their families; and

WHEREAS, there is no recent reliable data in Montana that substantiates the economic or social impacts of gambling; and

WHEREAS, the results of gambling studies conducted in other states and on a national basis are not specifically relevant to conditions in Montana.

Be it enacted by the Legislature of the State of Montana:

Section 1. Gaming study commission -- composition -- vacancies. (1) There is an interim gambling study commission.

(2) The commission is composed of the following five members:

(a) one member, to be appointed by the governor, who holds a doctorate in a social science that is pertinent to socioeconomic analysis;

(b) two members from the Montana university system, one from the bureau of business and economic research or the sociology department of the university of Montana, the other from the school of business or the sociology department of Montana state university. The president of the university of Montana and the president of Montana state university shall each nominate three candidates for commission membership. The governor shall select and appoint one member from each list of nominees.

(c) one member, to be appointed by the governor, who is a mental health professional and who holds a doctorate degree or a master's degree with relevant subsequent certification and who has experience in the treatment of mental disorders that manifest in addictive behavior that includes gambling but who has no significant financial interest in the treatment of gambling addiction;

(d) one member, to be appointed by the governor, who is a business owner who does not have an economic interest in and is not related to a person who has an economic interest in the gambling industry.

(3) The members of the commission shall elect a presiding officer from among the members.

(4) Any vacancy occurring on the commission must be filled in the same manner as the original appointment.

Section 2. Meetings. The presiding officer shall schedule meetings of the commission as considered necessary and shall give notice of the time and place of each meeting to the members of the commission.

Section 3. Reimbursement of expenses -- compensation. Each member of the commission is entitled to reimbursement for expenses as provided in 2-18-501 through 2-18-503.

Section 4. Powers and duties -- staff support -- recommendations -- report. (1) The commission shall request, fund, and subsequently evaluate and publicize a detailed study of the socioeconomic effects of gambling in Montana. The study may include but is not limited to:

(a) a demographic profile of the people who participate in gambling in Montana, including both residents and nonresidents;

(b) the number of private sector jobs and the amount of personal and business income directly or indirectly attributable to gambling;

(c) the impact of gambling on employment and income in other sectors of the economy outside of the gambling industry;

(d) the amount of tax revenue collected by the state and by local governments that is directly or indirectly attributable to gambling;

(e) the amount of expenditures by the state and by local governments, including law enforcement agencies, that is directly or indirectly attributable to gambling;

(f) demographic data on pathological and problem gamblers that is derived in a way to allow longitudinal comparisons with earlier studies in Montana;

(g) the impact of gambling on state and federal government transfer payments;

(h) data on the effects of gambling on the family, such as statistics related to divorce, spousal abuse, child abuse and neglect, and other familial dysfunction as well as general health and economic statistics that are pertinent to family stability and well-being; and

(i) the relationship of gambling to the numbers of Montana citizens who file for bankruptcy, who bring cases to small claims court, and who are subject to real property foreclosures.

(2) The commission shall establish goals and a budget for an unbiased and scientifically credible study as well as minimum qualifications and selection criteria for persons who submit proposals to conduct the study.

(3) The commission is responsible for determining the most cost-effective allocation of the funds appropriated in [section 5].

(4) The legislative services division shall provide staff support to the commission for administrative purposes and for the purpose of drafting and issuing of a detailed request for proposals in order to recruit qualified persons to conduct the study or studies. The legislative services division may expend funds from the appropriation provided in [section 5] for staff services provided by the legislative services division to the commission.

(5) State and local agencies shall cooperate with the commission in the conduct of the study.

(6) On or before September 1, 1998, the commission shall submit to the legislature and

the governor a comprehensive written report of its findings, conclusions, and recommendations. If legislation is recommended, the report must include a draft of the legislation.

(7) On or before October 1, 1998, the commission may use any available means, including informational public meetings, to disseminate the results of the study to the citizens of Montana.

Section 5. Appropriation. (1) There is appropriated to the legislative services division for the purposes of funding and administering the study described in [section 4] and supporting the commission described in [section 1] \$100,000 from the state lottery fund established in 23-7-401.

(2) The appropriation in subsection (1) is a biennial appropriation.

Section 6. Section 23-7-402, MCA, is amended to read:

"23-7-402. Disposition of revenue. (1) A minimum of 45% of the money paid for tickets or chances must be paid out as prize money. The prize money is statutorily appropriated, as provided in 17-7-502, to the lottery.

(2) Commissions paid to lottery ticket or chance sales agents are not a state lottery operating expense.

(3) That part of all gross revenue not used for the payment of prizes, commissions, and operating expenses, together with the interest earned on the gross revenue while the gross revenue is in the enterprise fund, is net revenue. Net Except as provided in subsection (5), net revenue must be transferred quarterly from the enterprise fund established by 23-7-401 to the state general fund.

(4) The spending authority of the lottery may be increased in accordance with this section upon review and approval of a revised operation plan by the office of budget and program planning.

(5) For the purposes of funding a study of the socioeconomic impacts of gambling, \$100,000 of net revenue may be appropriated from the enterprise fund established by 23-7-401."

Section 7. Effective date. [This act] is effective July 1, 1997.

Section 8. Termination. [Section 6] terminates June 30, 1999.

-END-

APPENDIX 2

OFFICE OF THE GOVERNOR

APPENDIX II

STATE OF MONTANA



MARC RACICOT
GOVERNOR

STATE CAPITOL
HELENA, MONTANA 59620-0801

September 3, 1997

The Honorable Mike Cooney
Secretary of State
State Capitol
Helena, MT 59620

Dear Secretary Cooney:

Please be informed that effective immediately, I have appointed the following individuals to the Gambling Study Commission, in accordance with 1997 House Bill 615, under the Legislative Services Division:

Ms. Phoebe Williams, P. O. Box 720, Deer Lodge, MT 59722, is to serve a term ending June 30, 1999, and fulfills the qualifications for being a business owner with no economic interest in the gambling industry.

Ms. Barbara Nemecek, 2608 Normal Avenue, Billings, MT 59101, is to serve a term ending June 30, 1999, and fulfills the qualifications for holding a doctorate in a social science pertinent to socioeconomic analysis.

Professor Rodney Brod, University of Montana, Sociology Department, Missoula, MT 59812, is to serve a term ending June 30, 1999, and fulfills the qualifications for being a representative of the sociology department of the University of Montana.

Professor Shannon Taylor, College of Business, Montana State University, Bozeman, MT 59717, is to serve a term ending June 30, 1999, and fulfills the qualifications for being a representative of the school of business at Montana State University.

Dr. Robert Caldwell, 3535 Pine Hills Drive, Helena, MT 59601, is to serve a term ending June 30, 1999, and fulfills the qualifications for being a mental health professional.

If you have questions regarding this appointment, please call Susan Ames, Appointments Coordinator, at extension 5551.

Sincerely,

A handwritten signature in black ink, appearing to read "Marc Racicot".

MARC RACICOT
Governor

MR:sba

cc: Steven Maly, Legis Services Division

EOR 9764

SEP 03 1997

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**STUDY TEAM'S NARRATIVE
FINAL REPORT**

Final Report

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Presented to the

Montana Gambling Study Commission

.....

by

Paul E. Polzin
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September 30, 1998

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Contents

Introduction	1
Executive Summary	i
Chapter 1	
Montana Gambling in a National and Global Context	1
Chapter 2	
A Profile of Montana Gamblers	5
Chapter 3	
A Profile of Montana Gambling Establishments	8
Chapter 4	
Gambling Establishments and the Montana Economy	15
Chapter 5	
Gambling and Taxes	17
Chapter 6	
Montana's Problem Gamblers	21
Chapter 7	
Social Impacts of Problem Gambling	27
Chapter 8	
Gambling and Crime	29
Definitions	33

Executive Summary

.....

The recent expansion of gambling in Montana has been guided by voters, the Legislature, and the courts, and has followed patterns that have occurred elsewhere in the United States and throughout the world. Montana gambling expenditures totaled about \$239 million in 1997. Video Gambling Machines (VGMs) account for most Montana gambling expenditures, but also legal are charitable gambling, lottery products (including Powerball), and pari-mutuel racing. Prizes are limited in all forms of gambling.

Most Montanans gamble: about 78 percent said they gambled last year. Gambling activity appears higher among American Indians; about 85 percent of the American Indians on the Flathead Reservation said they gambled last year. Survey respondents were asked whether they spent money for one or more gambling activities, including charity games (such as raffles and 50/50 tickets) and horse racing. The three most popular games in Montana are VGMs, Montana Lottery products (e.g. Powerball), and scratch tickets. Each of these three games has experienced decreased participation since a 1992 study, but the overall proportion of Montanans who gamble has remained stable—they now play a wider variety of games. It is difficult to find distinguishing characteristics that separate frequent gamblers from infrequent and non-gamblers. Tourist and other nonresidents account for relatively little gambling activity; their 1997 expenditures were about \$10 million, about 4.2 percent of the total.

Most legal Montana gambling occurs in a licensed gambling establishment. There are about 1,740 of these licensed establishments, ranging from the small bar with no VGMs to the gas station/convenience store/casino adjacent to a freeway exit. Gambling accounts for about 24 percent of total gambling establishment revenue. While the percentage varies from establishment to establishment, it averages less than 50 percent for all gambling establishment categories, except those with 20 VGMs. The net margin (total revenue minus most costs) for all gambling establishments averaged 13.8 percent of revenue. There is little evidence of out-of-state influence or concentration of gambling establishment ownership. Most owners are Montanans and are associated with only one establishment; a few persons own all or part of a number of gambling establishments.

Montana gambling establishments employ 16,300 workers, with 10,000 having face-to-face contact with gamblers. The average annual wage for all gambling establishment workers is \$9,600. Other related industries are gambling equipment manufacturers and vendors (route operators). Gambling equipment manufacturers employ about 375 workers, with average earnings of about \$34,000 per year. Gambling equipment vendors may also be gambling establishment owners, and most are Montanans. No revenue or employment data was collected which separates vendor and gambling establishment information.

Gambling is large compared to other Montana industries, both in terms of revenue and employment. But, when it comes to affecting statewide economic growth, gambling establishments are more like grocery stores and movie theaters rather than farms, ranches, sawmills, and mines. Specifically, since nonresidents account for a small share of gambling expenditures, gambling establishment receipts do not represent a net injection of new funds into the Montana economy, which create additional jobs and income via the "multiplier." Gambling establishments make sizable purchases from other industries in the state, including \$23 million from utilities, \$21 million for advertising, and \$10 million for insurance. These linked industries would experience impacts from increases or decreases in gambling establishment activity, but they would be roughly counterbalanced by opposite changes in other industries (because the overall Montana economy remains unchanged). There is relatively less gambling activity in rural areas. When gambling establishments take out loans, it is from a local lender, who may a branch of a nationwide company.

Legal gambling in Montana (except American Indian gambling on reservations) is taxed, with the proceeds going to state, county, and municipal governments. The Video Gambling Machine Tax is the major gambling tax, contributing about \$37 million to state, county, and municipal governments. Cities and towns have become particularly dependent on the VGM tax because of legal limits placed on their ability to raise revenue from property taxes and other sources.

Problem gamblers are becoming more of a problem in Montana as well as throughout the nation. Montana's problem gambling rate rose since a 1992 study, but other states have also reported similar increases. American Indians have above average problem gambling rates, but there are no data to determine if it has increased. One can't spot a problem gambler walking down the street because they have few distinguishing characteristics, although they are more likely to be divorced or separated. While problem gamblers can choose from a variety of gambling activities, their favorite games are VGMs, lottery products (e.g. Powerball), and scratch tickets. They account for a disproportionate share of gambling activity (36 percent of VGM revenue, 28 percent of live keno, 18 percent of scratch tickets, 11 percent of other lottery, and 25 percent of live bingo) and have a higher incidence of personal bankruptcy. About six percent of problem gamblers seek professional treatment, and roughly \$560,000 per year would pay their outpatient treatment costs.

The social impact of gambling is a lively topic of conversation, but few facts are known, either in Montana or anywhere in the world. Montana Gamblers Anonymous members were surveyed to learn more about the impacts of their problem gambling, and this information was supplemented by patient records from two residential gambling treatment programs in the state. Data concerning these extremely pathological gamblers suggest they are very few in number, but do, in fact, suffer from problems such as depression, domestic violence, alcohol abuse, and financial distress. They also have relatively more encounters with the criminal justice system.

Despite the high criminal activity of extremely pathological gamblers, there was only limited correlation between gambling and overall crime rates in Montana. There was no statistical correlation between crime rate growth and gambling expansion. The only statistically significant correlation was between the amount of gambling in Montana counties and certain property crime rates. This link was definitely there, but the impact of gambling on crime rates was small. A hypothetical \$1 million increase in VGM expenditures may be linked to at least \$32,250 in crime victim cost.

Montana Gambling in a National and Global Context

Montana Gambling Today

Gambling in Montana currently consists of commercial/charitable gambling, lottery products, and pari-mutuel wagering on horses and dogs. Lottery products are sold by retailers statewide. Video gambling machines (VGMs), live keno/bingo, and card games are offered by establishments licensed by the state. Individual establishments may operate no more than 20 VGMs, with each machine awarding prizes of up to \$800 per game. Montana gambling establishments do not offer slot machines or table games, such as blackjack, roulette, or craps.

Gambling activity is reported as consumer expenditures, which is defined as wagers minus payouts to players. Montana legal gambling totaled about \$239 million in 1997. About \$225 million, or 94 percent was commercial/charitable gambling, with the remaining \$14 million generated from products sold by Montana Lottery and pari-mutuel wagering. These figures differ from those reported by the Montana Lottery and the Montana Board of Horse Racing, because they report their gambling activities as gross wagers, without deducting payouts. American Indian Reservation gambling is just beginning in Montana, and their gambling establishment figures are not included in this report.

Historic Roots of Montana Gambling

Montana's current legal gambling environment has evolved from a long tradition, dating back to the free-wheeling mining and logging camps of the last century. Montana's gambling expansion has been guided by the Legislature, the courts, and voter initiatives.

Montana's Gambling Over the Past 25 Years:

1972:

Montana's new constitution outlawed all gambling, except that permitted by law. Subsequent legislation legalized bingo, raffles, sports pools, and certain card games.

1976:

The Montana Supreme Court ruled keno is a form of bingo, thus legalizing electronic keno.

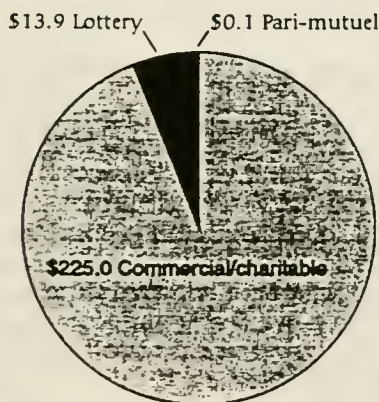
1982:

An initiative to legalize slot machines, pull tabs, and blackjack was defeated.

1985:

Holders of on-premise liquor licenses were authorized to operate up to five video poker machines

Figure 1
Montana Gambling Expenditures
FY 1997 (millions of dollars)



Figures derived: Montana Gambling Control Division, Montana Lottery, Montana Board of Horse Racing.

Gambling Products in Montana

Commercial/Charitable

Examples: Video gaming machines, live bingo/keno, card rooms, sports tabs.

Regulator: Montana Department of Justice, Gambling Control Division.

Lottery

Examples: Powerball, Tri-West Lottery, Montana Cash.

Regulator: Montana Department of Commerce, Montana Lottery.

Pari-mutuel

Examples: Horse and dog racing.

Regulator: Montana Department of Commerce, Board of Horse Racing.

Chapter 1: Montana Gambling

and, in some jurisdictions, an unlimited number of video keno machines. Montana was the first state to permit video gambling in bars.

1986:

A lottery initiative was approved by voters.

1987:

The Montana Legislature authorized video keno and bingo machines. The Montana Legislature enacted the Video Gambling Machine Tax equal to 15 percent of video gambling machine expenditures.

1989:

Wagering on out-of-state simulcast horse racing was legalized. All gambling was brought under state regulation.

1991:

Blackjack was rejected by the Montana Legislature.

1995 and 1997:

Bills were defeated to establish an automated "dial up" monitoring system for electronic gambling machines and a trust fund to treat problem gamblers.

1997:

The Montana Legislature authorized the Montana Gambling Study Commission.

Nationwide Trends in Legal Gambling

Nationwide legal gambling has greatly expanded during the past 25 years. All but two states (Utah and Hawaii) now have legal gambling in some form. In 1974, legal gambling expenditures in the United States totaled about \$3 billion and occurred primarily in the 13 states with lotteries, two states with off-track betting, and Nevada with its multitude of gambling activities (Commission on the Review of National Policy Toward Gambling 1976). By 1996, gambling expenditures reached almost \$47 billion, an increase of almost 1,400 percent from 1974 (Christiansen 1997).

Casino gambling has spread rapidly as state and local governments attempt to use gambling to promote economic development and expand their tax sources. The earliest efforts to legalize casinos outside of Nevada and Atlantic City came in South Dakota and Colorado, where small-stakes casino gambling was approved by referendum in several old mining towns. Riverboat casinos have spread rapidly in the 1990s. The first riverboat casinos in Iowa had limited wagers and losses. But, as the casinos spread to Illinois, Indiana, Louisiana, Mississippi, and Missouri, limits were lifted, and "dockside" gambling became more prevalent than "riverboat" gambling.

The Indian Gaming Regulatory Act of 1988 created a structure for gambling on American Indian lands throughout the United States. In states where charitable or social gambling is permitted, the federal government established

a framework for American Indian tribes to negotiate with state governments to establish casino-style gambling (Eadington 1991). In 1998 there were 281 American Indian gambling facilities in 28 states. These facilities were operated by 184 of the 555 tribes officially recognized by the U.S. government (GAO 1997).

Lotteries have been established in 37 states and the District of Columbia. They offer a multitude of games that blur the boundaries between traditional lottery products and other forms of gambling, including instant or scratch tickets and daily number games. In addition, electronic gaming devices offer keno, poker, and line games.

Electronic gambling devices (also known as video lottery, VLTs, VGMs, or video poker) and pari-mutuel racing offer contrasting trends within gambling. The availability of electronic gambling has expanded rapidly into many states, including Montana. Conversely, pari-mutuel racing has struggled to compete in a vastly expanded gambling environment. Since 1990, amounts wagered at horse and dog tracks have been stable or declining in many states, including Montana (International Gaming and Wagering Business).

Types of legal gaming are summarized in Table 1. The differences between the types of gambling are not always distinct. Pari-mutuel racetracks now offer VGMs in some states. State lotteries sell a variety of scratch and other products. Even the term "casino" is difficult to define. Casinos range from destination/riverboat facilities with many games catering primarily to nonresidents, to local casinos—in states such as Montana and South Dakota—that offer limited games and are oriented toward the local market.

Technological innovations of the 1990s and the 21st century have the potential to change gambling in many ways. "Cashless" gambling allows wagering through credit or debit cards. "Home access" gambling will allow cable television to bring satellite wagering into homes through the use of interactive television. Several airlines now offer interactive gambling during international flights. Finally, there is the prospect of lottery games, sports wagering and casino gambling on the Internet. There are now approximately 40 sites on the Internet where anyone with a computer, modem and Internet access can wager on lotteries, card games, slot machines, and sports.

A growing opposition has accompanied the expansion of legal gambling. Citizen groups have formed to prevent or repeal legislation permitting forms of legal gambling. Electronic gambling devices and casinos have attracted the most opposition because of their perceived social impacts.

Opposition groups have been particularly effective in limiting electronic gambling devices. Thousands of video poker machines have been removed from non-licensed establishments in Nova Scotia and New Brunswick. The Alberta provincial government recently held a high-visibility conference to debate the regulation of video poker machines.

Table 1
Types of Legal Gambling In the United States in 1997

<u>State</u>	<u>Bingo</u>	<u>Destination/ Dockside Casinos</u>	<u>Local Casinos</u> *	<u>Video gaming outside casinos</u> **	<u>American Indian reservation gaming</u> *	<u>Lottery</u> ***	<u>Pari- mutuel</u> ****	<u>Offtrack</u> *****
Alabama	✓						✓	✓
Alaska	✓							
Arizona	✓				✓	✓	✓	✓
Arkansas						✓	✓	✓
California	✓				✓			
Colorado	✓		✓		✓	✓	✓	✓
Connecticut	✓				✓	✓	✓	✓
Delaware	✓			✓		✓	✓	✓
D.C.	✓					✓		
Florida	✓							
Georgia	✓					✓	✓	✓
Hawaii								
Idaho	✓				✓	✓	✓	✓
Illinois	✓	✓				✓	✓	✓
Indiana	✓	✓				✓	✓	✓
Iowa	✓	✓			✓	✓	✓	✓
Kansas	✓				✓	✓	✓	✓
Kentucky	✓					✓	✓	✓
Louisiana	✓	✓		✓	✓	✓	✓	✓
Maine	✓							
Maryland	✓					✓	✓	✓
Massachusetts	✓					✓	✓	✓
Michigan	✓	✓			✓	✓	✓	✓
Minnesota	✓				✓	✓	✓	✓
Mississippi	✓	✓			✓			
Missouri	✓	✓				✓	P	✓
Montana	✓		✓	✓	✓	✓	✓	✓
Nebraska	✓				✓	✓	✓	✓
Nevada	✓	✓		✓	✓	✓	✓	✓
New Hampshire	✓							
New Jersey	✓	✓				✓	✓	✓
New Mexico	✓		A	A	✓	✓	✓	✓
New York	✓				✓	✓	✓	✓
North Carolina	✓				✓			
North Dakota	✓		✓		✓		✓	✓
Ohio	✓					✓	✓	✓
Oklahoma	✓				✓	✓	✓	✓
Oregon	✓			✓	✓	✓	✓	✓
Pennsylvania	✓				✓	✓	✓	✓
Rhode Island	✓			✓	✓	✓	✓	✓
South Carolina	✓			✓		✓	✓	✓
South Dakota	✓		✓	✓	✓	✓	A	A
Tennessee						✓		✓
Texas	✓						N	
Utah								
Vermont	✓					✓	✓	A
Virginia	✓					✓	A	A
Washington	✓				✓	✓	✓	A
West Virginia	✓			✓		✓	✓	A
Wisconsin	✓				✓	✓	A	✓
Wyoming	✓						✓	
Puerto Rico	✓	✓				✓	✓	✓
Virgin Islands			A					

✓ Legal and operative.

P Permitted by law and previously operative.

A Authorized, but not yet implemented.

N Operative, but no pari-mutuel wagering.

* Games vary by state and may include video gaming.

** Includes video offerings of lottery, bingo, poker, and keno, off reservations.

*** Includes keno, instant pull-tabs, lotto, numbers, and passives.

**** Includes grey hounds, jai-alai, harness racing, quarter-horse, and thoroughbred racing.

***** Includes interstate inter-track, intrastate intertrack, off-track betting, race/sports-book, and telephone betting.

* A few "grandfathered" locations.

Note: Destination/Dockside casinos cater mostly to nonresidents. Local casinos have limited games and serve mostly to nearby residents.

Sources: International Gaming and Wagering Business, September 1997; and Indian Gaming Management Staff, U.S. Bureau of Indian Affairs, August 1998.

Two recent South Dakota elections have included referenda to repeal electronic gambling—both failed. Many Louisiana parishes have banned video poker machines. In South Carolina, legislative efforts recently failed to ban video gaming machines throughout the state.

Worldwide Trends

The expansion of gambling is a worldwide phenomenon. The establishment of lotteries, casinos, and the increased availability of electronic gambling devices are occurring on all continents. Since the 1970s, lotteries and casinos have been established in Europe, North America, Australia, Asia, and Africa. In the 1990s, urban or city-centered casinos—featuring electronic gaming and appealing to local gamblers as well as tourists—have been the emerging international trend. Legal gambling issues, such as the resulting tax revenue and unforeseen social costs, are now common issues facing governments throughout the world.

References

Christiansen, E.M. 1997. "The United States 1996 Gross Annual Wager: U.S. Gaming Faces New Growth Challenges," *International Gaming & Wagering Business*. 18(8).

Commission on the Review of the National Policy Toward Gambling. 1976. *Gambling in America*. Washington, DC: U.S. Government Printing Office.

Eadington, W.R. 1991. "Public Policy Considerations and Challenges and the Spread of Commercial Gambling." *Gambling and Public Policy: International Perspectives*. W.R. Eadington & J. A. Cornelius (eds). Reno: University of Nevada Press.

GAO. 1997. "Report to the Committee on Ways and Means, U.S. House of Representatives."

Indian Gaming Management Staff. Bureau of Indian Affairs, Office of the Commissioner. Washington, DC.

International Gaming & Wagering Business. Various issues.

A Profile of Montana Gamblers

The Survey

Information concerning Montana gamblers was obtained through a telephone survey conducted by the Bureau of Business and Economic Research at The University of Montana-Missoula. During February and March 1998, a random cross section of Montana adults was selected and queried about their gambling. Two separate screens were administered to identify problem gamblers. The survey yielded 1,227 completions.

The survey procedures were designed to ensure that the respondents represented a statistically accurate cross section of Montana adults. For example, hearing-impaired respondents received their questionnaire in the mail, and translators were obtained for those who did not speak English. Interviewers were trained in techniques to maximize the responses to sensitive questions. The overall response rate was 83 percent. This high response rate increases the statistical reliability of the findings.

An additional sample of 108 American Indians living on the Flathead Reservation was also surveyed. The Flathead Reservation sample was chosen to increase the number of American Indians studied in the most cost-effective manner. There were also 81 respondents (out of 1,227) to the statewide survey who identified themselves as American Indians. These American Indian respondents were distributed throughout the state, both on reservations and other communities.

The Results

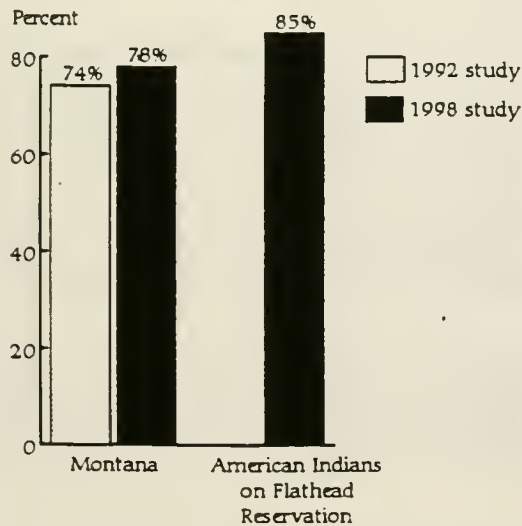
Roughly 78 percent of Montana adults reported gambling in the past year. This figure encompasses all gambling, including charitable gaming, VGMs, Powerball, and wagering on sporting events. Among American Indians on the Flathead Reservation, the corresponding figure was approximately 85 percent.

The overall gambling participation rate in Montana appears to be stable. A 1992 study—titled "Gambling Involvement and Problem Gambling in Montana" and conducted by Rachel Volberg of Massachusetts-based Gemini Research—reported a gambling participation rate of 74 percent (Vollberg 1992). Considering the error margins for both percentages, this increase is not statistically significant.

Characteristics of past year gamblers and non- or infrequent gamblers are summarized in Table 1. Montana is unusual in that gamblers are evenly split between males and females. About 51.5 percent of those who reported gambling in the last year are male, which is statistically indistinguishable from the 48.5 percent of gamblers who are female.

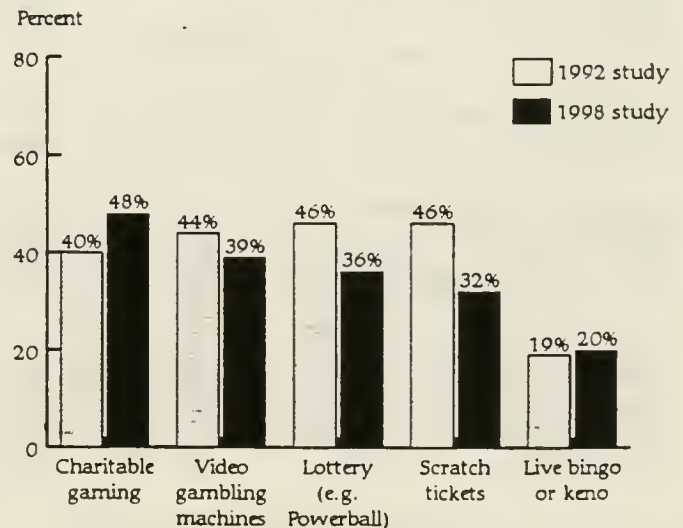
Gender has been strongly linked to participation in different types of gambling. In the 1970s, women were significantly less likely than men to gamble at casinos and through lotteries, but more likely than men to participate in types of charitable gambling, such as bingo and

Figure 1
Past Year Gambling
Participation Montana



Note: 1992 data for American Indians cannot be calculated.
Source: Gemini Research Ltd.

Figure 2
Past Year Participation by Game
Montana Gamblers



Source: Gemini Research Ltd.

raffles (Kallick et al 1979). In the 1990s, while men are still more likely to wager on games of skill and horse racing, women are just as likely as men to gamble at casinos and through lotteries (Volberg & Banks 1994). Recent research suggests that there are few differences between men and women in gambling frequency and wagering levels. However, the scope of womens' gambling—the number of different types of gambling in which

women participate—is significantly narrower than the scope of mens' gambling (Hraba & Lee 1996).

Montanans receiving income from Social Security have a lower gambling participation rate than those not receiving Social Security income. Montanans receiving public assistance have the same gambling participation rate as those not receiving public assistance.

Table 1
Characteristics of Montana Gamblers
[Percent of Past Year Gamblers]

	Past year	Non or infrequent	Past year	Non or infrequent	American Indian past year gamblers on Flathead Reservation*
	1992 (N=756)	1992 (N=264)	1998 (N=951)	1998 (N=276)	1998 (N=91)
Gender					
Male	50.0	49.0	51.5	41.3	44.0
Female	50.0	51.0	48.5	58.7	56.0
Age					
18-29	17.8	9.7	24.2	8.3	NA
30-39	26.6	16.2	21.3	13.0	NA
40-49	21.5	18.5	23.2	17.7	NA
50-64	19.4	18.1	19.2	23.1	NA
65+	14.7	37.5	12.0	37.9	NA
Ethnicity					
White	95.8	96.5	90.7	92.4	0.0
American Indian	2.9	2.7	7.5	4.0	100.0
Other	1.3	0.8	1.8	3.6	0.0
Marital Status					
Married	65.7	60.2	57.9	58.3	57.1
Widowed	5.8	16.6	5.1	22.5	5.5
Divorced/separated	12.0	10.8	15.3	9.1	20.9
Never married	16.4	12.4	21.8	10.1	2.2
Education					
Less than high school	6.1	12.0	7.4	15.0	9.9
High school+	63.6	60.6	64.9	57.7	69.2
BA +	30.4	27.4	27.7	27.4	20.9
Work Status					
Employed	65.5	44.8	69.8	48.0	65.1
Unemployed	2.3	5.0	1.9	0.7	3.3
Not in labor force (retired, etc.)	32.2	49.8	28.3	51.3	31.6
Transfer payment income					
Received Social Security	NA	NA	20.2	46.0	NA
No Social Security	NA	NA	79.8	54.0	NA
Received Public Assistance	NA	NA	5.4	5.1	NA
No Public Assistance	NA	NA	94.6	94.9	NA
Household Income					
< \$15,000	19.8	34.0	20.9	30.2	34.1
\$15,000-\$35,000	44.3	41.0	30.5	33.0	17.7
\$35,001-\$50,000	19.9	14.0	19.0	21.1	14.3
\$50,001 and up	16.0	10.8	29.6	15.6	33.3
Median income**	NA	NA	\$34,000	\$28,000	

*Too few non or infrequent gamblers to reliably analyze.

**Medians estimated using categorical data.

NA: data not available.

Source: Gemini Research Ltd.

Compared to the 1992 study, Montana's 1998 past year gamblers were more likely to be:

- younger;
- American Indian;
- single (never married, divorced, or separated); and
- employed with a relatively higher household income (see Table 1 for median incomes).

Similar to other states, Montana's past year gamblers were more likely than infrequent or non-gamblers to be:

- younger;
- American Indian;
- never married;
- higher paid and more educated.

Participation by Game

Video gambling and lottery products such as Powerball and scratch tickets are the three most popular forms of commercial gambling. About 39 percent of Montana adults said they played VGMs in the last year, while the corresponding figures for Powerball and scratch tickets were 36 percent and 32 percent, respectively.

Between 1992 and 1998, participation rates declined for each of the three most popular games, following the trend reported in other areas. Video gambling dropped from 44 percent to 39 percent; Powerball decreased from 46 percent to 36 percent; and scratch tickets declined from 46 to 32 percent. The decreasing game participation rates have been attributed to the maturation of the gambling products: the novelty of a new game leads to high participation soon after its introduction, which then usually declines.

More Montanans are playing a variety of games, according to the 1992 and 1998 studies. This reconciles the apparent contradiction between the stabilizing overall participation rate and the declining rates for the three most popular games. Also, the diversification blurs the personality distinctions between the players of the various games.

Nonresident Gamblers

Surveys of nonresidents visiting Montana have repeatedly found that few (12 to 15 percent) reported gambling, and those who did gamble spent relatively small amounts (ITRR). These benchmark surveys, on which all nonresident expenditure estimates are based, were conducted in winter 1993, summer 1996, and winter 1998. In addition, a separate, forthcoming study of snowmobilers found none reporting that they gambled while in Montana (BBER).

Nonresident gambling expenditures totaled about \$10 million in 1997. This figure was derived using the findings of the surveys and information systems maintained by the UM Institute for Travel and Recreation Research, which also prepares most other tourism-related expendi-

tures for Montana. The nonresident figure has a relatively large error margin because it is based on few observations.

This \$10 million in nonresident expenditures represents about 4.2 percent of the total statewide gambling expenditures and about 0.7 percent of total expenditures in Montana by nonresidents. If nonresidents report gross gambling expenditures (without subtracting payouts), their percentage of gambling expenditures would be smaller.

Nonresident gambling is concentrated in a few areas and is important for certain establishments. The relatively high dependence of certain communities on Gambling Machine Tax revenue (such as Eureka in 1990 and Superior in 1997) suggest that cross-border patronage and freeway access may add to local demand.

Participation Rates vs. Overall Trends

Further information is needed to identify why video gambling appears to be growing (as indicated by tax payments), yet participation rates have declined. Specifically, longitudinal research is needed to identify the relationships between gambling participation, expenditures, and gambling problems. Factors that may affect these relationships include:

- Rising incomes, which may increase per person gambling expenditures.
- Montana's growing population—the adult population has increased by 9.2 percent since 1992—may include a disproportionate share of gamblers.
- Increased prevalence of problem and pathological gamblers, who are both regular gamblers and large spenders.

References

- Bureau of Business and Economic Research, The University of Montana-Missoula, 1998 Snowmobile Study Update, forthcoming.
- Hraba, J. & G. Lee. 1996. "Gender, Gambling and Problem Gambling," *Journal of Gambling Studies* 12(1): 83-101.
- Institute for Travel and Recreation Research, The University of Montana-Missoula, unpublished information.
- Kallick, M., Suits, D. Dilman, T. & J. Hybels. 1979. *A Survey of American Gambling Attitudes and Behavior*. Research Report Series, Survey Research Center, Institute for Social Research. Ann Arbor: University of Michigan Press.
- Volberg, R. A. & S. M. Banks. 1994. "A New Approach to Understanding Gambling and Problem Gambling in the General Population." Paper presented at the Ninth International Conference on Gambling and Risk Taking. Las Vegas, NV.

A Profile of Montana Gambling Establishments

The Survey

As part of the 1998 gambling study, the Bureau of Business and Economic Research surveyed licensed gambling establishments in Montana. Questionnaires were mailed in March 1998 to a random cross section of 800 gambling license holders. Responses were received from 427 establishments by July 2, 1998, yielding a response rate of 55 percent. There are no response rate standards for business surveys (Paxson 1995).

The questionnaire was designed to capture business-related items from the gambling establishments in an efficient and unobtrusive manner. For example, the relevant line number was included when the information could be obtained from the respondents' tax forms. Also, the questions closely resembled those in other business surveys—such as the 1997 *Census of Business*, conducted by the U.S. Bureau of the Census—which may have been recently completed by the respondents.

Each mailing contained letters from industry leaders supporting this survey and urging their members to complete the questionnaire, which certainly increased the response rate.

General Characteristics

Montana licenses about 1,740 gambling establishments, and nearly all must hold on-premise alcohol licenses. The remaining establishments are either non-profit organizations, or firms that were "grandfathered" in under other arrangements. Each gambling establishment is authorized to operate up to 20 video gambling machines.

The general characteristics of Montana gambling establishments are presented in Table 1. Separate data are presented for establishments based on the number of VGMs. The characterization of these categorizes was based on their revenue sources and is arbitrary. Travel stops are gas stations/convenience stores/casinos.

Gambling establishments with few machines are more likely to be sole proprietorships, and less likely to be corporations. About 40 percent of the establishments with one to five machines are sole proprietorships, compared to 12 to 16 percent for travel stops and casinos. The remaining establishments are partnerships and nonprofit organizations, such as fraternal groups. The legal form of

Table 1
Characteristics of Montana Gambling Establishments

Type	Number of establishments	Video machines	Revenue [thousands]	Revenue sources*	Ownership*	Planned expansion in next year	More than 15 years in business	Had gambling less than 5 years
Establishments with no machines	85	0	\$59	Food 45% Alcohol 30%	Sole Proprietor 45% Corporation 30%	12%	70%	NA
Restaurant with bar	518	1-5	\$296	Food 54% Alcohol 26% Gambling 5%	Sole Proprietor 40% Corporation 46%	14%	53%	21%
Bar with food	464	6-10	\$318	Food 30% Alcohol 38% Gambling 14%	Sole Proprietor 37% Corporation 46%	15%	58%	20%
Restaurant with bar/casino	309	11-19	\$397	Food 29% Alcohol 33% Gambling 28%	Sole Proprietor 30% Corporation 61%	17%	52%	16%
Travel stop	234	13.5 (average)	\$2,454	Food 14% Fuel 65% Gambling 19%	Sole Proprietor 12% Corporation 79%	3%	58%	47%
Casino	130	20	\$811	Food 22% Alcohol 13% Gambling 62%	Sole Proprietor 16% Corporation 75%	21%	31%	26%

*Totals do not add to 100.

NA: data not available.

Source: Bureau of Business and Economic Research, The University of Montana-Missoula.

organization determines the financial reporting rules an establishment must follow.

Most establishments predate the introduction of video gambling in 1985. More than half of the establishments in each type of category have been in business more than 15 years. However, more than two-thirds of establishments in the casino category (each with 20 VGMs) have been in business less than 15 years.

Most establishments have long featured gambling. Only travel stops have recently changed their character, with 47 percent adding gambling in the last five years. The corresponding figures for the other types of establishments ranged from 16 to 26 percent.

With the exception of travel stops, between 12 and 21 percent of the gambling establishments plan to expand during the next year. Only 3 percent of travel stops plan to expand next year, perhaps because many of them recently remodeled when they added gambling.

Financial Condition of Gambling Establishments

Montana gambling establishments received about \$923 million in revenue in 1997. Gambling activities accounted for about \$219 million, roughly 24 percent of total revenue. Other important revenue sources included food (27 percent), alcohol (19 percent), and gasoline and fuel (22 percent). Miscellaneous revenue sources, such as membership dues, accounted for the remaining 9 percent.

The largest expense for Montana gambling establishments was the cost of goods sold. The purchase of gasoline, food, alcohol, and other items for resale accounted for about \$358 million, or 41 percent of total expenses. Payroll costs, including fringe benefits, totaled about \$150 million, or 16 percent. Rent for video gambling machines was about 19 million, or 2 percent. Other costs include taxes and licenses (3 percent), advertising (2 percent) and interest (2 percent).

With products ranging from gasoline to video poker, and widely different rules for financial reporting, gambling establishments' diverse sales and operations are difficult to track. The technical definition of profit will be different for each establishment, depending on their accounting practices and whether they are a proprietorship, partnership, corporation, or nonprofit organization. As a result, profit cannot be calculated for this industry.

Net margin provides an overall financial perspective of Montana gambling establishments and may be calculated from revenue and expense data. The gambling establishments reported total revenue of \$923 million and expenses of about \$795 million, leaving a net margin of \$128 million, or 13.8 percent of total revenue. The net margin includes before tax returns to owners (proprietors, partners, and stock holders), capital charges, and certain other costs not specified on the questionnaire (such as casino promotion). The value of the liquor license—which can exceed \$350,000 in certain areas—is not explicitly included in these calculations.

Gambling establishments differ significantly in their sources of revenue. As shown in Figure 2, revenue gener-

ated from gambling ranges from 5 to 62 percent, depending of the type of gambling establishment. The maximum share of 62 percent was reported by those establishments with 20 VGMs. This is the only establishment category where gambling provides more than one-half of the total revenue.

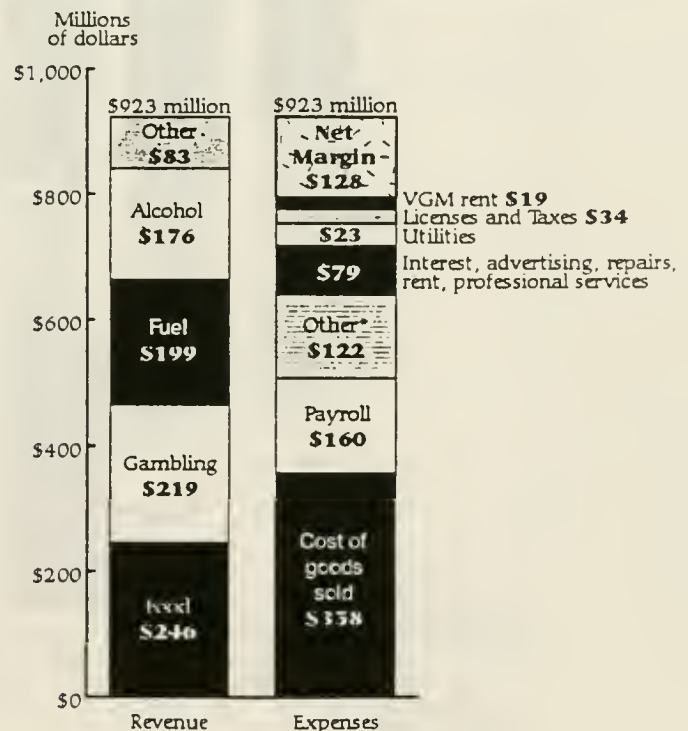
The net margin cannot be calculated for the six types of gambling establishments because of the variations in ownership, products, and accounting practices. The best estimate of net margin for each category is the industry-wide average of 13.8 percent.

Gambling Establishment Employment and Wages

There is no standard definition for gambling-related employment. Three separate estimates are presented in Figure 3, and they provide ranges in employment and worker numbers for 1997.

- Total gambling establishment employment was 16,300 workers.
- Roughly 10,000 employees (of the 16,300) have face-to-face contact with gamblers.
- Revenue allocated jobs refers to employment fully supported by gambling. The estimate of

Figure 1
Revenue and Expenses
Montana Gambling Establishments, 1997



*Other includes purchase of gaming supplies, other purchases, and other expenses.

Source: Bureau of Business and Economic Research, The University of Montana-Missoula.

Chapter 3: Profile of Establishments

3,700 workers is based on the gambling establishments' 24 percent of total revenue that is derived from gambling.

Employees at gambling establishments earned an average of \$189 per week, excluding benefits and tips. The corresponding figure for those with face-to-face contact could not be calculated because of different reporting schemes. Assuming they worked 51 weeks per year, the estimated average annual wage for all gambling establishments workers was \$9,600. In comparison, the 1997 statewide average for workers in eating and drinking places was \$8,200. Employees in amusement and recre-

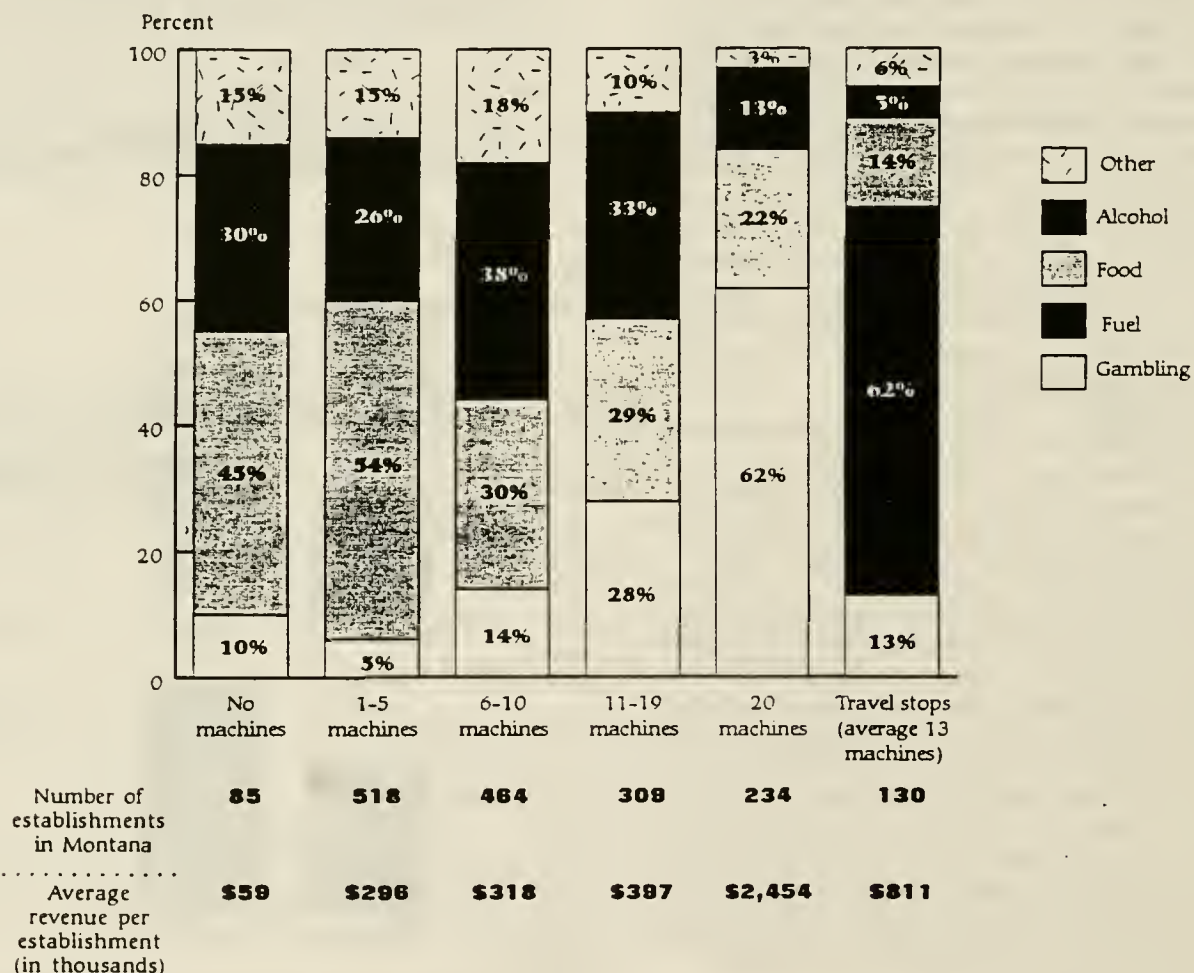
ation services earned an average of \$11,000 per year, and employees for hotels and lodging places earned an average of \$10,900. These latter figures may include some tips.

The average hours worked per week for all gambling establishment employees was 29. The corresponding figure for face-to-face workers was 30.

Gambling Manufacturers

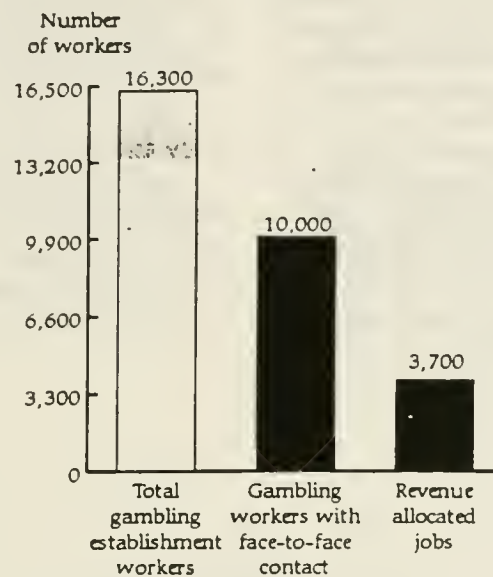
There are three gambling products manufacturers in Montana with total employment of approximately 375 people. These workers average about \$34,000 annually in wages and salaries, well above the earnings for workers in gambling establishments.

Figure 2
Sources of Revenue
Montana Gambling Establishments, by Type, 1997



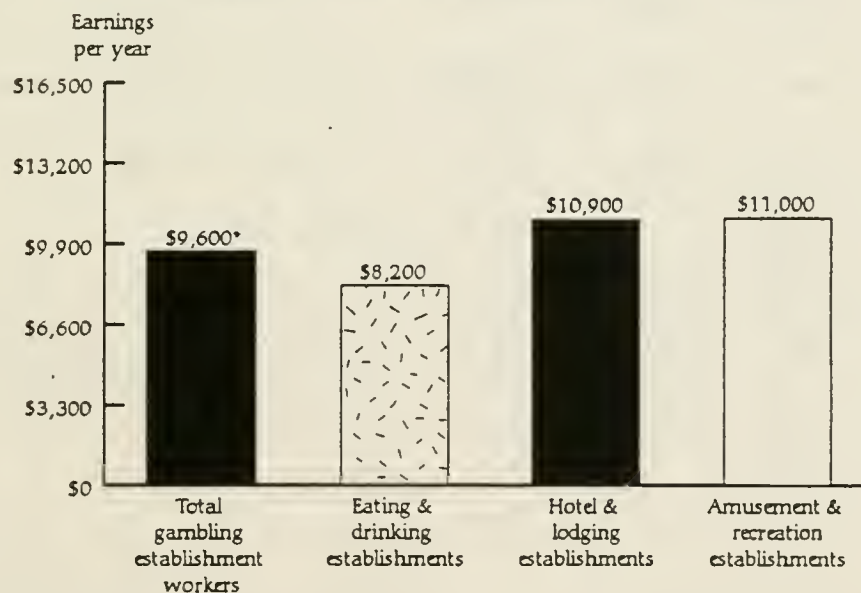
Source: Bureau of Business and Economic Research, The University of Montana-Missoula.

Figure 3
Gambling Establishment Employment, 1997
Alternative Definitions



Source: Bureau of Business and Economic Research, The University of Montana-Missoula

Figure 4
Average Annual Wages and Salaries, 1997



*Based on 51 work weeks per year.

Sources: Bureau of Business and Economic Research, The University of Montana-Missoula; Montana Department of Labor and Industry.

American Indian Tribal Gaming

American Indian tribal gaming is authorized under the Indian Gaming Regulatory Act of 1988. As summarized in Table 2, two Montana tribes have not yet signed compacts with the state, and four others have signed in the last two years. American Indian tribal gaming compacts generally permit only those games that are allowed elsewhere in that state. In Montana, table games such as craps and black jack are not allowed at tribal casinos.

The state of gambling on reservations and the apparent higher rates of gambling participation among American Indians do not appear to measurably affect nearby gambling establishments. The 17 gambling establishments adjacent to the Fort Peck Reservation have these similarities to their statewide counterparts:

- They average about seven VGMs per establishment.

- Gambling accounted for about 13 percent of total revenue, compared to the statewide average of 14 percent for similar establishments.

Conversely, gambling establishments adjacent to the Fort Peck Reservation generated an average annual revenue of approximately \$150,000, which is about one-half the statewide figure for similar establishments.

VGM Vendors

Vendors, also known as route operators, provide about 66 percent of Montana's VGMs to gambling establishments under a variety of rental, lease, and revenue-sharing agreements.

Most route operator licenses are owned by Montanans, although there is no legal requirement concerning resi-

Table 2
Montana Tribal Gaming
July 1, 1998

<u>Tribes</u>	<u>Compact</u>	<u>Compact effective date</u>	<u>Compact length</u>	<u>VGM payout limit</u>	<u>VGMs per business</u>	<u>Types of Gambling</u>
Assiniboine & Sioux (Fort Peck)	Yes	6/24/92	10 years	\$1,000	100 tribal 20 individual members	VGM, simulcast racing, live keno, lottery
Crow	Yes	3/6/96	5 years	\$1,000	100 tribal in Crow Agency	All games legal under state law
Chippewa-Cree	Yes	5/10/96	Automatic extension	\$1,000	100 tribal 20 individual members	All games legal under state law
Northern Cheyenne	Yes	4/30/98	10 months	\$1,000	100 tribal	All games legal under state law
Blackfeet	No					
Confederated Salish & Kootenai	Yes	3/17/97	3 years	\$1,000	41 at single tribal locations 20 other tribal 20 individual members	All games legal under state law
Gros Ventre & Assiniboine (Fort Belknap)	No					

Note: Tribal Gaming establishments operated by tribal members on tribal land do not pay state gambling taxes or fees.
Source: Montana Gambling Control Division.

dence. As shown in Table 3, only four of the 99 vendors are owned by nonresidents, and seven have both resident and nonresident owners.

Route operators fall into three groups:

- Gambling establishment owners who are also route operators. Many gambling establishment owners have chosen to legally separate VGM ownership from their operation, perhaps to take advantage of financial opportunities. These route operators include those with a small number of VGMs (under 40) and several with hundreds of VGMs at multiple statewide locations.
- Vendors providing a variety of coin-operated machines, including VGMs, video and pinball games, and vending machines.
- Vendors specializing in VGMs.

Vendor employment and wages have not been estimated, except to the extent that they are included in the reports for gambling establishments with common owners. Vendors may also be classified in a number of industries, and their employment and wages are not easily derived using published data.

Concentration of License Ownership

Several entities own or partially own numerous gambling licenses, but most own or partially own only one. In one case, a single name appears on 35 licenses. About 45 percent of the owners of vendor (manufacturer, distributor, and route operator) licenses also own all or part of a gambling license.

Montana Gambling Control Division records show 2,542 entities (either people or corporations) that own all or part of a gambling or vendor license, as shown in Table 4. There are 2,411 entities that own only one license, 82

Table 3
Montana Video Gambling Machine Vendors
By Ownership and Number of Machines

<u>Number of Machines</u>	<u>Total vendors</u>	<u>Montana owners</u>	<u>Out-of-State owners</u>	<u>Montana and out-of-state owners</u>
0-10	13	12	1	
11-20	24	23		1
21-30	8	7		1
31-40	16	15	1	
41-100	12	10	1	1
101-200	11	10		1
201-400	6	5		1
401-600	4	3		1
601-800	3	2		1
801 and over	2	1	1	
Total	99	88	4	7

Source: Montana Gambling Control Division.

linked industries will theoretically be counterbalanced by opposite changes elsewhere. Only fluctuations in direct gambling taxes, such as the Video Gambling Machine Tax, will have net effects.

Gambling products manufacturers are a different story. They appear to sell most of their products outside the state, and to the extent this is true, these manufacturing jobs and labor income are one of Montana's basic industries. These firms are included in published figures for Montana basic industries in the "other manufacturing" category (Polzin 1998).

Community Analysis of Gambling

VGM gambling in Montana was disproportionately concentrated in Cascade (Great Falls), Yellowstone (Billings), and Butte-Silver Bow counties. Rural areas, as measured by the 49 smallest counties, had relatively less VGM gambling. In general, gambling establishments derive most of their revenue from non-gambling sources, and their location may depend on many factors.

Video gambling machine taxes—which are directly related to VGM activity—that were distributed to governments in Cascade County totaled about 11.3 percent of the statewide total, as reported in Table 1. In contrast, the county's population was approximately 9.0 percent of the state total, and wage and salary employment—one measure of overall economic activity—accounted for 8.9 percent. Gambling establishment employment was 21.5 percent of the state total, well above the percentages for population and employment.

Similar to Cascade County, VGM tax percentages in Yellowstone and Butte-Silver Bow counties were higher than the corresponding population and wage and salary employment figures. The lowest concentrations of VGM activity were in Gallatin (Bozeman) and Yellowstone (Billings) counties, where the percentage of statewide VGM tax distributions was well below the corresponding figure for population and total wage and salary employment. Flathead County (Kalispell) had a very small percentage of gambling establishment employment.

Governments in Montana's 49 smallest counties received about 32.4 percent of the distributed VGM taxes. The population of the counties was approximately 41.5 percent of the state total, and the corresponding figure for employment was 33.8 percent. Gambling establishment employment in these counties was 35.5 percent of the statewide figure.

References

Montana Department of Labor and Industry, 1998.
Internet site <http://jsd.dli.mt.gov/lmi/lmi.html> (accessed 8/20/98).

Montana Gambling Control Division.

Paul E. Polzin. 1998. "Montana Growth Stabilizes," *Montana Business Quarterly*, 36 (1).

Table 1
Gambling Employment, VGM Taxes, Total Employment and Population
Selected Montana Counties, 1997

<u>County</u>	<u>Gambling establishment employment</u>		<u>Countywide* employment</u>		<u>VGM taxes</u>		<u>Population</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Amount (in thousands)</u>	<u>Percent</u>	<u>Number (in thousands)</u>	<u>Percent</u>
Yellowstone	2,000	12.3	59,492	16.7	54,209	18.7	126	14.3
Cascade	3,500	21.5	31,608	8.9	2,553	11.3	70	9.0
Lewis and Clark	1,100	6.8	27,226	7.7	1,435	6.4	53	6.1
Butte-Silver Bow	700	4.3	14,688	4.1	1,423	6.3	34	3.9
Gallatin	1,000	6.1	29,635	8.4	1,096	4.8	61	7.0
Missoula	1,700	10.4	43,716	12.3	2,470	11.0	80	10.1
Flathead	500	3.1	28,801	8.1	2,061	9.1	72	8.2
All other counties	5,800	35.5	119,278	33.8	7,274	32.4	365	41.5
Total Montana	16,300	100.0	354,444	100.0	\$22,511	100.0	879	100.0

*Wage and salary employees only.

Sources: Bureau of Business and Economic Research, The University of Montana-Missoula, Montana Report of Labor and Industry; Montana Gambling Control Division; U.S. Bureau of the Census

Gambling and Taxes

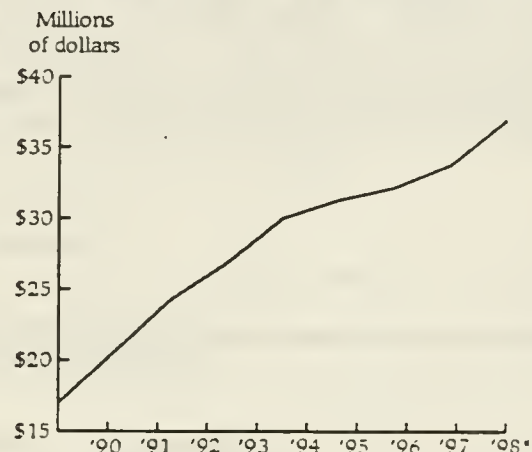
Montana Gambling Taxes

The Video Gambling Machine Tax, the major gambling tax in Montana, is equal to 15 percent of VGM expenditures, which are wagers minus payouts. Montana law specifies that one-third of the VGM tax revenue is distributed to the state general fund, and two-thirds to the municipality—or county, if the activity occurred outside city limits—where the gambling occurred. The VGM Tax is not collected on American Indian tribal gaming operations.

The Montana Lottery is required to distribute its net revenue to the state general fund. All pari-mutuel wagers are returned to gamblers except for 1 percent, which is retained to fund the Board of Horse Racing. There are also other gambling taxes and fees which go to the state general fund or to regulatory and administrative agencies. A summary of gambling tax revenue and distribution is presented in Table 1.

Gambling-related businesses pay a variety of other state and local taxes, such as property taxes, corporation profit taxes, and locally imposed sales taxes. Proprietors, stockholders, and employees also pay income taxes. These indirect taxes are usually not analyzed with gambling taxes because they are imposed on general economic activity. The overall amounts of indirect taxes are relatively unaffected by changes in gambling: if total economic activity is stable, the demise of one firm will be replaced by the growth in another.

Figure 1
Video Gambling Machine Tax Revenues
Montana, 1990-1998



* Projected
Source: Montana Gambling Control Division.

Table 1
Gambling Tax Revenues and Distribution
Montana, FY 1997
[Millions of dollars]

Source	Total taxes	Distributed to		
		County/ municipal governments	State general fund	Regulatory agencies
VGM tax	\$33.8	\$22.6	\$11.2	
VGM permit fees	3.4	1.7		1.7
Bingo/keno/taxes/permits	0.1		0.1	
Card table fees	0.1			-
Operator license fees	0.1			0.1
Manufacturer license fees	0.2			0.1
Other fees or licenses	0.1	-		-
Lottery	9.6		6.6	3.0
Pari-mutuel racing	0.1			0.1
Total	\$47.4	\$24.3	\$17.9	\$5.1

- Less than \$100,000

Note: Totals may not sum due to rounding.

Sources: Montana Lottery; Montana Gambling Control Division; and Montana Board of Horse Racing.

Chapter 5: Gambling Taxes

Video Gambling Machine Tax revenue has more than doubled in the last decade. As shown in Figure 1, they rose from \$17 million in 1990 to a projected \$37 million in 1998. Revenue from the Montana Lottery and pari-mutuel racing has been stable or declining during the same period.

VGM Taxes and Montana Cities and Towns

Video Gambling Machine Tax revenues have become increasingly important for all Montana governments. Initiative 105 (effective July 1, 1987) limited increasing revenue generated by property taxes, and Senate Bill 195 (passed by the 1997 Legislature and currently before the courts) may place further restrictions on these sources.

Cities and towns are particularly dependent on Video Gambling Machine Tax revenue. As reported in Table 2,

Table 2
Video Gambling Machine Tax Distributions
FY 1990 and FY 1997

	FY 1990	FY 1997
State		
VGM tax distribution (\$ millions)	\$5.7	\$11.3
Percent of general fund expenditures	0.9	1.1
Counties		
VGM tax distribution (\$ millions)	\$2.9	\$5.2
Percent of appropriations (16 funds)	1.2	1.5
Municipalities		
VM tax distribution (\$ millions)	\$8.4	\$17.3
Percent of general fund appropriations	10.0	13.9

Sources: Montana Gambling Control Division; and Montana State University, State and Local Government Center.

Table 3
Video Gambling Machine Tax Revenues as Proportion of Total Appropriations for 16 Funds
Montana Counties, FY 1990 and FY 1997

County	— Proportion —		— Rank —		County	— Proportion —		— Rank —	
	1990	1997	1990	1997		1990	1997	1990	1997
Anaconda/Deer Lodge	0.084	0.092	1	2	Madison	0.011	0.011	13	18
Beaverhead	0.004	0.008	33	24	McCone	0.001	0.001	45	47
Big Horn	--a	0.001	51	45	Meagher	0.006	0.006	27	30
Blaine	0.002	0.002	41	41	Mineral	0.047	0.063	3	3
Broadwater	0.013	0.027	11	5	Missoula	0.014	0.017	10	11
Butte/Silverbow	0.067	0.100	2	1	Musselshell	0.002	0.007	39	28
Carbon	0.006	0.011	25	19	Park	0.021	0.023	5	7
Carter	--a	--a	49	52	Petroleum	0.0	--a	56	56
Cascade	0.017	0.015	7	13	Phillips	0.004	--a	32	53
Chouteau	0.004	0.003	34	38	Pondera	0.008	0.005	21	32
Custer	0.005	0.005	28	31	Powder River	--a	--a	55	54
Daniels	0.002	0.001	38	44	Powell	0.007	0.007	23	27
Dawson	0.004	0.021	30	8	Prairie	0.001	0.001	46	46
Fallon	--a	0.000	53	51	Ravalli	0.013	0.010	12	20
Fergus	0.006	0.007	26	26	Richland	0.002	0.004	40	34
Flathead	0.018	0.024	6	6	Roosevelt	0.003	0.014	36	15
Gallatin	0.008	0.007	20	25	Rosebud	0.009	0.018	18	10
Garfield	0.001	0.002	47	43	Sanders	0.008	0.009	22	22
Glacier	--a	--a	52	55	Sheridan	0.002	0.002	42	39
Golden Valley	0.002	0.002	43	40	Stillwater	0.015	0.019	9	9
Granite	0.008	0.006	19	29	Sweet Grass	0.003	0.003	37	37
Hill	0.011	0.012	14	17	Teton	0.002	0.004	44	35
Jefferson	0.016	0.014	8	14	Toole	0.004	0.002	31	42
Judith Basin	0.004	0.008	35	23	Treasure	--a	0.001	54	49
Lake	0.009	0.003	16	36	Valley	0.010	0.017	15	12
Lewis & Clark	0.009	0.013	17	16	Wheatland	0.005	0.010	29	21
Liberty	0.001	--a	48	50	Wibaux	--a	0.001	50	48
Lincoln	0.044	0.041	4	4	Yellowstone	0.007	0.005	24	33

--a: less than .0005.

Sources: Montana Gambling Control Division; and Montana State University, State and Local Government Center.

VGM FY 1997 tax distributions accounted for almost 14 percent of cities' and towns' total general fund appropriations. In FY 1990, these tax distributions were 10 percent of their general fund appropriations.

The list of 10 cities most dependent on VGM taxes changed significantly between 1990 and 1997. Only Grass Range and Rexford appear on both. Six of the top 10 cities in 1997 were either near Montana borders (Kevin, Rexford, Libby, and Hardin) or on Interstate 90 (Superior, Columbus), suggesting that cross-border patronage and freeway access may add to local demand.

The counties most dependent on VGM taxes have remained relatively unchanged: seven of the top 10 counties in 1990 were also on the list in 1997. Anaconda-Deer Lodge and Butte-Silver Bow were either the first- or second-ranked county in both years. They both have consolidated city-county governments and their entire VGM tax distribution (except for Walkerville) is paid to a single entity.

VGM Taxes in Other States

Other states derive revenue from video gambling

machines. Interstate comparisons are risky, however, because of the variety of different situations and the way taxes are computed. In Oregon, for example, VGMs are owned by the state and rented or leased to the operator. This allows the state to earn the profits, while reducing the risks and other burdens on the operator. In general, VGMs have provided states with increasing revenue, but annual growth has been sporadic, as in Montana (International Gaming & Wagering Business).

South Dakota and Louisiana are two states similar to Montana. Both have private VGM ownership and define the tax base (net revenue) similarly. South Dakota imposes a tax of 50 percent of net revenue, while the rates for Louisiana range from 22.5 to 32.5 percent of net revenue, depending on whether the VGM is located in a race track, truck stop, or restaurant/bar. The effective tax rate—the amount actually paid—also depends on license and permit fees, which differ between states.

Reference

International Gaming & Wagering Business. Various Issues.

Table 4
Montana's Top Ten Governments Dependent on VGM Taxes

<u>Cities and towns</u>		<u>Counties</u>	
<u>1990</u>	<u>1997</u>	<u>1990</u>	<u>1997</u>
1. Hamilton	Grass Range	Anaconda-Deer Lodge	Butte-Silver Bow
2. Grass Range	Kevin	Butte-Silver Bow	Anaconda-Deer Lodge
3. Clyde Park	Superior	Mineral	Mineral
4. Froid	Columbus	Lincoln	Lincoln
5. Eureka	Bridger	Park	Broadwater
6. Lima	Rexford	Flathead	Flathead
7. Troy	Dodson	Cascade	Park
8. Rexford	Hardin	Jefferson	Dawson
9. Poplar	Harlowton	Stillwater	Stillwater
10. White Sulphur Springs	Libby	Mineral	Rosebud

Source: Montana Gambling Control Division; and Montana State University, State and Local Government Center.

Table 4
Video Gambling Machine Tax Revenues as Proportion of General Fund Appropriations
Montana Cities and Towns, FY 1990 and FY 1997

Municipality	Proportion		Rank		Municipality	Proportion		Rank	
	1990	1997	1990	1997		1990	1997	1990	1997
Alberton	0.08	0.20	76	25	Jordan	0.06	0.13	97	59
Bainville		0.11		76	Kalispell	0.19	0.23	14	15
Baker	0.05	0.10	104	77	Kevin	0.13	0.39	29	2
Bearcreek	0.02	0.05	112	102	Laurel	0.10	0.13	66	60
Belgrade	0.13	0.14	33	49	Lavina	0.01		115	
Belt	0.13	0.20	42	23	Lewistown	0.15	0.16	20	43
Big Sandy	0.12	0.21	53	21	Libby	0.11	0.29	59	10
Big Timber	0.07	0.07	90	90	Lima	0.31	0.12	6	61
Billings	0.10	0.14	63	50	Livingston	0.08	0.15	77	46
Boulder	0.13	0.14	34	51	Malta	0.08	0.12	82	63
Bozeman	0.08	0.08	92	87	Manhattan	0.13	0.10	32	79
Bridger	0.14	0.36	31	5	Medicine Lake	0.05	0.05	101	101
Broadus	0.00	0.20	79	26	Melstone	0.12	0.17	54	37
Brockton	0.12	0.10	24	80	Miles City	0.08	0.12	83	64
Browning	0.10	--a	116		Missoula	0.08	0.10	78	78
Cascade	0.12	0.12	44	65	Moore	0.13	0.23	35	16
Chester	0.10	0.20	65	24	Nashua	0.08	0.06	85	95
Chinook	0.12	0.15	50	47	Neihart	0.03	0.02	109	111
Choteau	0.09	0.15	73	45	Opheim	0.11	0.19	60	28
Circle	0.06	0.05	96	104	Outlook	0.01	0.02	114	110
Clyde Park	0.55	0.10	3	81	Philipsburg	0.15	0.22	19	18
Columbia Falls	0.18	0.19	16	29	Plains	0.12	0.25	55	12
Columbus	0.08	0.37	84	4	Plentywood	0.08	0.09	80	82
Conrad	0.05	0.13	103	53	Plevina	0.05	0.06	100	99
Culbertson	0.08	0.07	81	92	Polson	0.10	--a	64	
Cutbank	0.11	0.21	57	20	Poplar	0.23	0.11	9	68
Darby	0.09	0.11	74	69	Red Lodge	0.07	0.07	91	91
Deerlodge	0.13	0.22	30	17	Rexford	0.25	0.34	8	6
Denton	0.03	0.06	110	96	Richey	0.02	0.04	113	107
Dillon	0.16	0.25	17	11	Ronan	0.11	--a	58	
Dodson	0.11	0.31	56	7	Roundup	0.12	0.19	47	33
Drummond	0.22	0.11	12	70	Ryegate	0.14	0.12	23	62
Dutton	0.14	0.15	26	48	Saco	0.07	0.06	87	98
East Helena	0.10	0.19	69	32	Scobey	0.15	0.13	21	56
Ekalaka	0.13	0.18	37	35	Shelby	0.09	0.16	70	41
Ennis	0.13	0.16	41	44	Sheridan	0.09	0.05	75	103
Eureka	0.40	0.13	5	55	Sidney	0.12	0.17	49	38
Fairfield	0.12	0.11	52	71	St. Ignatius	0.02	--a	111	
Fairview	0.10	0.18	62	34	Stanford	0.07	0.06	88	97
Flaxville		0.04		108	Stevensville	0.10	0.14	67	52
Forsyth	0.08	0.09	86	83	Sunburst	0.09	0.07	72	89
Fort Benton	0.05	0.04	99	105	Superior	0.19	0.39	15	3
Fork Peck	0.00	0.00	117	113	Terry	0.07	0.08	89	88
Froid	0.44	0.11	4	73	Thompson Falls	0.13	0.17	38	36
Fromberg	0.14	0.07	25	94	Three Forks	0.13	0.11	28	75
Geraldine	0.06	0.09	94	85	Townsend	0.16	0.21	18	22
Glasgow	0.04	0.07	106	93	Troy	0.27	0.17	7	40
Glendive	0.14	0.13	27	57	Twin Bridges	0.06	0.01	93	112
Grass Range	0.58	1.03	2	1	Valier	0.06	0.09	95	84
Great Falls	0.10	0.19	68	30	Virginia City	0.12	0.19	51	27
Hamilton	1.67	0.24	1	14	Walkerville	0.06	0.11	98	72
Hardin	0.20	0.31	13	8	West Yellowstone	0.05	0.04	102	106
Harlem	0.04	0.19	107	31	Westby	0.13	0.12	40	66
Harlowton	0.23	0.29	11	9	White Sulphur Spr.	0.23	0.16	10	42
Havre	0.11	0.17	61	39	Whitefish	0.13	0.13	39	58
Helena	0.09	0.13	71	54	Whitehall	0.14	0.21	22	19
Hobson	0.12	0.11	46	74	Wibaux	0.13	0.24	36	13
Hot Springs	0.12	--a	48		Winnett	0.04	0.09	108	86
Hysham	0.12	0.03	45	109	Wolf Point	0.04	0.11	105	67
Joliet	0.13	0.06	43	100					

--a: No gambling compact in force on reservation.

Sources: Montana Gambling Control Division; and Montana State University, State and Local Government Center.

Montana's Problem Gamblers

Identifying Problem Gamblers

Montana problem gamblers were identified using the South Oaks Gambling Screen (SOGS) and the Diagnostic and Statistical Manual Fourth Edition (DSM-IV) screen (Fisher 1996, Lesieur 1987). Each screen assigns points based on answers to gambling-related questions, and individuals with scores exceeding predetermined levels are assigned to various problem gambling categories. For example, individuals who score 3 or 4 points on the SOGS lifetime or past year screens are classified as "problem gamblers." Those who score 5 or more points on either screen are classified as "probable pathological gamblers." The DSM-IV has a similar scale, but measures only past year problems.

The SOGS was originally developed in the 1980s, while the DSM-IV dates from 1994. While the screens use slightly different criteria, recent research indicates they are both consistent and reliable. Most of the following Montana analysis uses the SOGS scores to allow comparison with the 1992 study, which predated DSM-IV (Volberg 1992). But, DSM-IV scores will be used in several instances to allow comparisons with other studies.

The Number of Montana Problem Gamblers

About 23,400 Montanans are problem gamblers. Of those, about 10,400 (+/- 4,500) are past year probable pathological gamblers. Roughly 13,000 (+/- 5,200) are in the less severe classification of past year problem gambler.

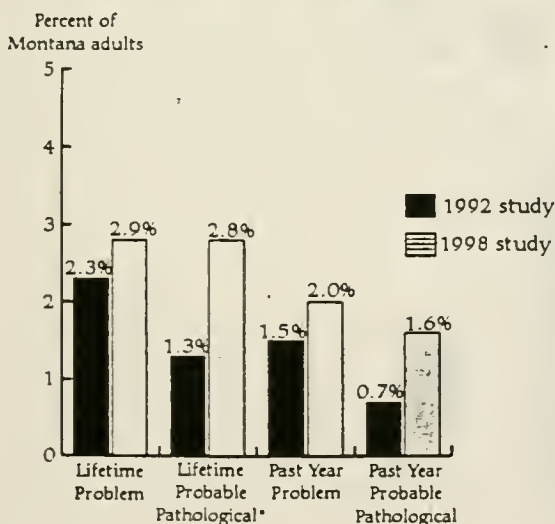
A longer-time perspective yields higher estimates. Using lifetime instead of past year responses, lifetime probable pathological gamblers number about 18,200 (+/- 6,500). The corresponding estimate for lifetime problem gambler is 18,800 (+/- 6,500).

Montana Problem Gambler Rates

Montana problem gambler rates rose between the 1992 and 1998 studies. Yet, Montana's overall problem gambling rate is similar to other states, as is the increase. Montana American Indians have higher problem gambler rates than the overall population.

As shown in Figure 1, past year probable pathological gamblers accounted for about 1.6 percent of Montana's 1997 adult population, up from 0.7 percent reported in the 1992 study. Past year problem gamblers were about

Figure 1
Probable Pathological and Problem Gamblers, Montana, 1992 and 1998

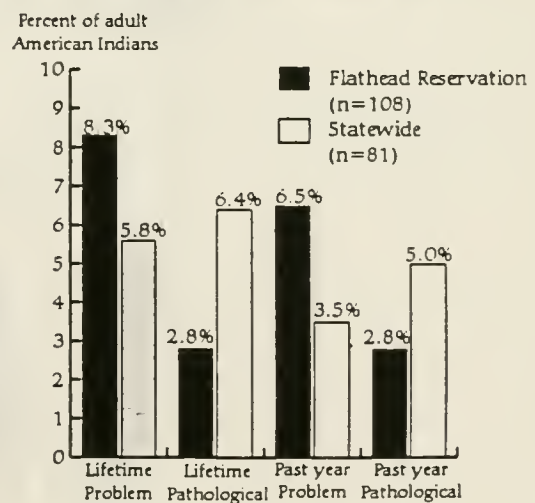


*Difference significant at the 0.1 level.

Note: Probable pathological and problem gamblers based on their SOGS scores.

Source: Gemini Research Ltd.

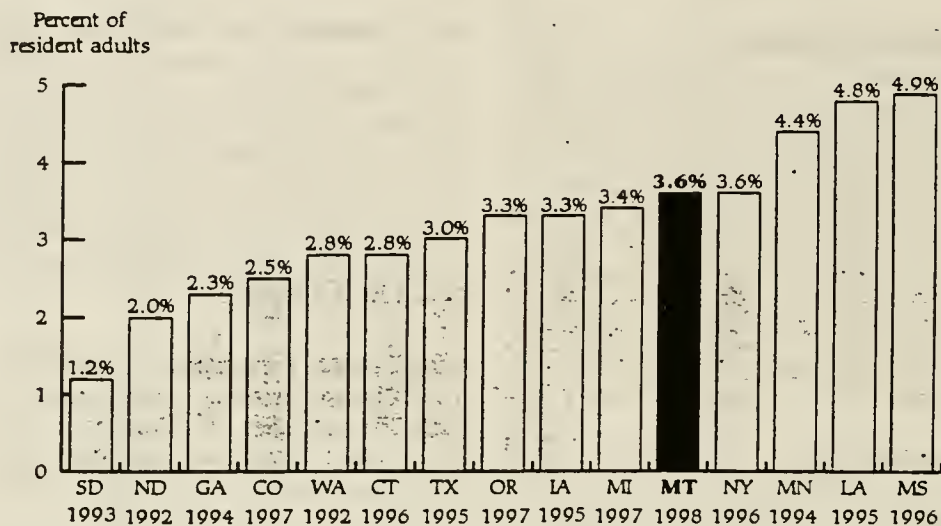
Figure 2
American Indian Problem and Pathological Gambling



Note: Probable pathological and problem gamblers based on their SOGS scores.

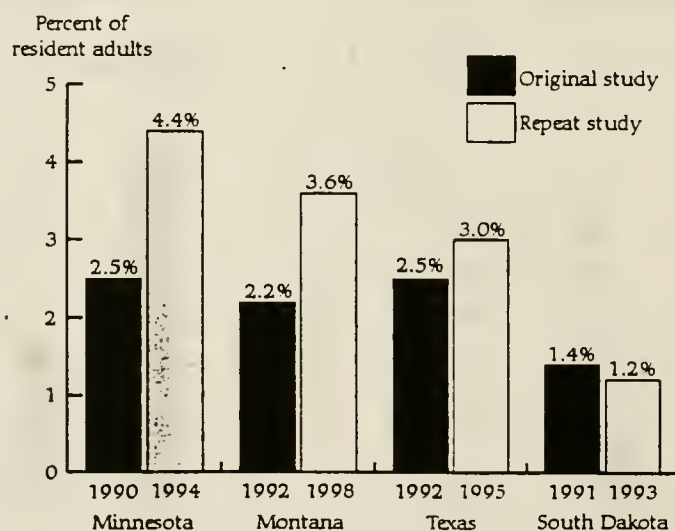
Source: The Bureau of Business and Economic Research; The University of Montana-Missoula.

Figure 3
Probable Pathological and Problem Gamblers
Selected States and Years



Note: Probable pathological and problem gamblers based on their SOGS scores.
Source: Gemini Research Ltd.

Figure 4
Probable Pathological and Problem Gamblers,
Various States and Years



Note: Probable pathological and problem gamblers based on their SOGS scores.
Source: Gemini Research Ltd.

2.0 percent of Montana adults in 1997, an increase from 1.5 percent reported in the 1992 study. Similarly, the lifetime probable pathological rate rose from 1.3 percent to 2.8 percent between the two studies, and the corresponding figures for lifetime problem gamblers were 2.3 percent and 2.9 percent, respectively.

Interstate comparisons of problem gambling are facilitated by summing the past year problem and the past year probable pathological gambling rates ($2.0 + 1.6 = 3.6$). As shown in Figure 3, Montana's 3.6 percent is in the mid-range of similar rates for other states. The highs are 4.5-5.0 percent (Mississippi and Louisiana), while the lows are 1.0-2.0 percent (North and South Dakota) (Volberg 1995, Volberg 1997, Volberg 1993, Volberg 1994). The rankings must be interpreted with care because of the error margins associated with all the state estimates.

Montana's overall problem gambling rate of 3.6 percent is up from 2.2 percent reported in the 1992 study. As pictured in Figure 4, two of three other states with comparable prevalence data also posted increases (Wallisch 1996, Emerson 1996). The lone exception was South Dakota, where changing rates may not be detected in studies only two years apart (Volberg 1994).

In Montana, American Indians have higher problem gambler rates than the rest of the state. In order to increase the number of American Indians in the 1998 gambling study, interviewers questioned Indians living on the Flathead Reservation. The data show that the probable pathological rate for the reservation was 2.8 percent, compared to 1.6 percent for all Montana adults. Though the Flathead Reservation rate was quite a bit higher than the rest of the state, it was significantly lower than the

rate of 5.0 percent for Indians statewide.

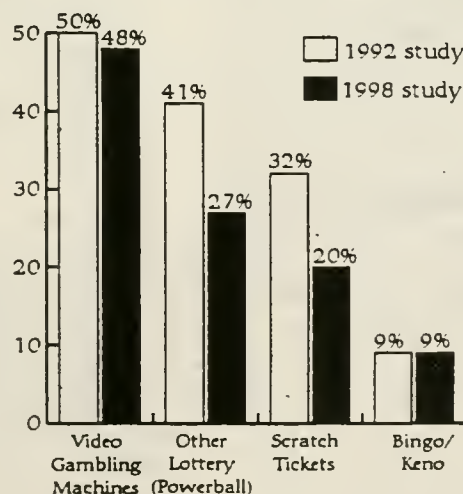
Especially worrisome is that among American Indians statewide, more people fall into the probable pathological category, rather than the problem category. By comparison, throughout Montana and even on the Flathead Reservation, more people fall into the problem category. In other words, gambling is a serious problem among Montana American Indians.

Comparisons could not be made between the 1992 study and the 1998 study because American Indian rates could not be calculated. The error margins for all American Indian rates are large because of the small number of respondents.

Problem Gamblers' Weekly Participation

Montana problem gamblers play VGMs and lottery games, including Powerball and scratch tickets, most often. VGMs and scratch tickets are activities with rapid play cycles and immediate replay opportunities. The preference for rapid cycle games has been reported in studies of problem gamblers elsewhere (Dickerson 1993, Volbert 1995a, Volberg 1997a). About 48 percent of Montana past year problem and probable pathological gamblers reported that they played VGMs on a weekly basis, while only 8 percent of the non-problem gamblers gave a similar response. About 20 percent of the problem and probable pathological gamblers purchased scratch tickets once a week or more, compared to 2 percent of the non-problem gamblers. Other games that problem gamblers are most likely to play weekly are lottery games (e.g. Powerball) and bingo/keno.

Figure 5
Weekly Participation of Past Year Problem
and Probable Pathological Gamblers
By Game



Source: Gemini Research Ltd.

Table 1
Profile of Montana Lifetime Problem and Probable Pathological Gamblers 1992 and 1998

	1992 (N=36)	1998 (N=70)
<u>Gender</u>		
Male	52.8	47.1
Female	47.2	52.9
<u>Age</u>		
18-29	34.3	25.7
30-39	34.3	22.9
40-49	14.3	20.0
50-64	17.1	22.9
65+	-	8.6
<u>Ethnicity</u>		
White	97.1	85.7
American Indian	-	14.3
Other	2.9	-
<u>Marital Status</u>		
Married	68.6	42.9
Widowed	-	2.9
Divorced/Separated	8.6	31.4
Never Married	22.9	22.9
<u>Education</u>		
Less than HS	5.6	16.9
HS + some Post	72.2	71.8
BA +	22.2	11.3
<u>Work Status</u>		
Employed	66.7	65.7
Unemployed	8.3	4.3
Other	25.0	30.0
<u>Income Status</u>		
<15K	20.6	38.6
15-35K	47.0	34.3
35-50K	20.6	10.0
50K+	11.8	17.1

Note: Problem and probable pathological gamblers score 3 or higher on lifetime South Oaks Gambling Screen. Percentages may not add to 100 due to rounding.
 Source: Gemini Research Ltd.

Table 2
Problem Gambling Services Selected States

State	Information	Prevention	Treatment
Washington	•		
Oregon	•		•
Iowa	•		•
South Dakota	•		•
Minnesota	•	•	•
Texas	•	•	•

Source: Gemini Research Ltd.

Not surprisingly, a disproportionate share of the players of these games are problem and probable pathological. For example, about 9 percent of Montana gamblers play VGMs on a weekly basis; approximately 20 percent of these gamblers score as past year problem and pathological gamblers. About 2 percent purchase instant lottery tickets once a week or more; 30 percent of them score as past year problem or pathological gamblers. Eight percent purchase other lottery products (such as Powerball); 13 percent of them are past year problem or probable pathological gamblers.

Comparing 1998 to 1992, fewer problem gamblers play lottery products (e.g. Powerball) and scratch tickets weekly that they did in 1992. However, they play VGMs and bingo/keno at about the same rate as they did in 1992. As shown in Figure 5, about 27 percent of problem and probable pathological gamblers said they regularly played other lottery products (e.g. Powerball), down from 41 percent in 1992. Similarly, the percentage playing scratch tickets weekly decreased from 32 to 20 percent between the 1992 and 1998 studies. The percentages regularly playing VGMs remained stable from 1992 at about 50 percent, and the 9 percent figure for bingo/keno also did not change.

Problem Gambler Profiles, Impacts on Families, and Implications for Gambler Services

Only a few distinguishing characteristics emerge from an examination of Montana problem gamblers' profiles, as shown in Table 1. They are:

- Montana problem or probable pathological gamblers are equally likely to be male or female (in other states, more are male).
- Educational attainment of problem gamblers is lower.
- Average age of Montana problem gamblers is now higher than reported in the 1992 study: 31 percent are now over 50 years of age versus 17 percent reported in the 1992 study.
- Problem gambler incomes are more evenly distributed now than in the 1992 study. The increase in the highest income category is noteworthy.
- Problem gamblers are more likely to be divorced or separated than was reported in the 1992 study.

What does the relative lack of distinguishing characteristics mean? It suggests that with the exception of American Indians and seniors, services for problem gamblers should be targeted broadly rather than at specific risk groups in the population. It also might be appropriate to target court staff, as well as marital and family counselors, because of the negative impacts gambling has on families and the ever-growing divorce rate among problem gamblers. In 1998, 31 percent of the problem and pathological gamblers are divorced (vs. 12.9 percent in the total population and 8.6 percent in the 1992 study).

Problem Gambling Programs

Twenty-one states currently have problem gambling programs, which provide information, public education, help-lines and referrals, training, and research (Volberg 1996). Some states also finance treatment services for problem gamblers. Programs are usually funded with a dedicated portion of lottery, pari-mutuel, or casino tax revenue. A small number of states fund programs as a line item in their general appropriation or divert funding by executive order or statute from existing gambling-related agencies (e.g. the advertising budget of the state lottery). Table 2 presents selected problem gambler programs in other states. Montana does not have a problem gambling program as yet.

Reimbursement contracts are the typical purchasing method for problem gambling programs in other states. State agencies commonly make grants or manage contracts with one of the 34 affiliates of the National Council on Problem Gambling. States also contract with other entities including academic institutions, other state agencies, and independent organizations. Some designate a problem gambling program manager to manage both prevention and treatment services.

There is limited research concerning the effectiveness of problem gambling programs (Lesieur 1991). Most problem gambling programs are less than 10 years old and assessment procedures for them are not well-developed.

Problem Gamblers' Share of Gambling Activity

Problem and probable pathological gamblers account

for a disproportionate share of gambling activity and taxes, based on their survey responses. As shown in Figure 6, problem gamblers account for about 36 percent of monthly VGM expenditures and thus about 36 percent of monthly VGM tax revenues. The corresponding figure for live keno is 28 percent; lottery 11 percent; scratch tickets 18 percent; and live bingo 25 percent (excluding one respondent who may have incorrectly answered the question). These estimates are based on gamblers' reports of their typical months' spending, and should be used with great care. Little research has been conducted which examines the accuracy of gamblers' reported spending (Volberg 1998). In particular, it is not known whether pathological gamblers make greater errors in their reported gambling expenditures than non-pathological gamblers.

Problem Gamblers and Personal Bankruptcy

Problem gamblers are more likely to file for bankruptcy. Among lifetime Montana problem or probable gamblers, about 10 percent have filed for bankruptcy. Approximately 4 percent of Montanans with no lifetime gambling problems have filed for bankruptcy. In comparison, about 22 percent of Montana Gamblers Anonymous members have ever filed for bankruptcy. (More about GA members in the next section.)

Problem Gambler Treatment Costs

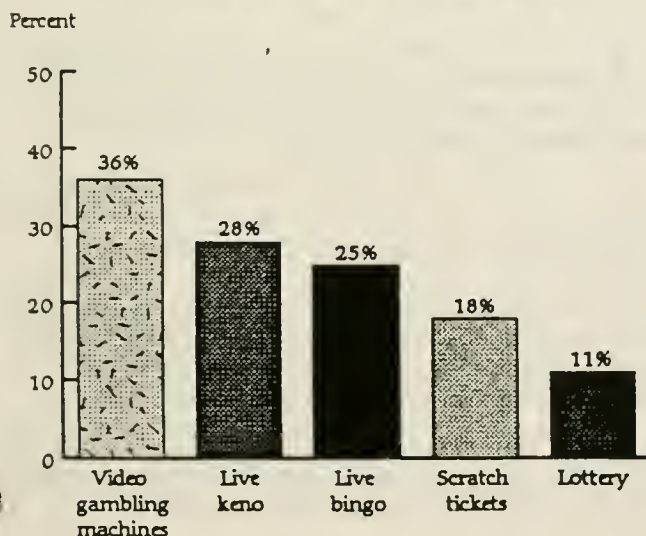
The majority of problem gamblers in treatment are outpatients. Outpatient treatment refers to one-on-one and group counseling sessions. Only a small proportion of problem gamblers require inpatient treatment, primarily those suffering from clinical depression and other serious problems (Cox 1997). Inpatient treatment occurs while a patient resides in a treatment facility—typically for a 28-day period—and costs six times more than outpatient treatment. In Montana, inpatient treatment costs about \$9,945 per patient, while outpatient treatment costs about \$1,600 (Rimrock Foundation 1998, and Montana Department of Public Health and Human Services 1998).

Given the per patient costs, the total cost of treatment depends on the proportion of problem and probable pathological gamblers seeking treatment. Table 5 presents cost estimates for both inpatient and outpatient treatment corresponding to a range of percentages of problem gamblers seeking treatment. For example, the cost for outpatient services would be \$560,000 per year if 6 percent of past year probable pathological gamblers sought treatment. The 6 percent figure is a rough estimate based on the number of persons in Montana seeking treatment as a proportion of the total number of problem and pathological gamblers based on the household survey.

The proportion of problem gamblers seeking treatment may rise after programs are established. In other states, several years elapsed before a sizable proportion of problem gamblers learned of the services and enrolled in treatment programs.

Successful problem gambler treatment requires planning and continuity of funding. Education and information may be emphasized initially. Prevention and treatment may become priorities later.

Figure 6
Gambling Expenditures by Game
Problem and Probable Pathological Gamblers
(Percent of Total Expenditures)



Source: Gemini Research Ltd.

Table 4
Inpatient and Outpatient Treatment Costs
Montana

<u>Percent Seeking Treatment*</u>	<u>Inpatient Cost (\$Million)</u>	<u>Outpatient Cost (\$Million)</u>
1	0.62	0.10
2	1.23	0.19
3	1.85	0.28
4	2.47	0.37
5	3.08	0.47
6	3.70	0.56
7	4.32	0.66
8	4.93	0.75
9	5.55	0.85
10	6.16	0.96

*Note: Of those scoring 5+ on DSM-IV (standard diagnostic cutoff).

Sources: Gemini Research Ltd; Rimrock Foundation, Rocky Mountain Treatment Center, Montana, Montana Department of Public Health and Human Services.

References

- Cox, S., H.R. Lesieur, R. J. Rosenthal & R.A. Volberg. 1997. "Problem and Pathological Gambling in America: The National Picture." Report prepared by the Research and Public Policy Committees of the National Council on Problem Gambling.
- Dickerson, M.G. 1993. "Internal and External Determinants of Persistent Gambling: Problems in Generalizing from One Form of Gambling to Another," *Gambling and Problem Gambling*. W. R. Eadington & J. A. Cornelius (eds). Reno: Institute for the Study of Gambling and Commercial Gaming, College of Business Administration, University of Nevada, pp.3-24.
- Emerson, Michael O. & J. Clark Laudergeran. 1996. "Gambling and Problem Gambling Among Adult Minnesotans: Changes 1990 to 1994," *Journal of Gambling Studies*, 12(3): 291-304.
- Fisher, S.E. 1996. Gambling and Problem Gambling Among Casino Patrons. Report to the British Casino Industry Consortium.
- Lesieur, Henry R. & Richard J. Rosenthal. 1991. "Pathological Gambling: A Review of the Literature (prepared for the American Psychiatric Association Task Force on DSM-IV Committee on Disorders of Impulse Control Not Elsewhere Classified)," *Journal of Gambling Studies*, 7: 5-40.
- Lesieur, H.R. & S.B. Blume, 1987. "The South Oaks Gambling Screen (SOGS): An Instrument for the Identification of Pathological Gamblers," *American Journal of Psychiatry*. 144: 1184-1188.
- Montana Department of Public Health and Human Services, 1998. Personal correspondence. Figures derived.
- Rimrock Foundation, 1998. Billings, MT. Personal correspondence.
- Volberg, Rachel A. 1992. "Gambling Involvement and Problem Gambling in Montana," Northhampton, MA: Gemini Research.
- Volberg, R. A. & E Silver. 1993. "Gambling and Problem Gambling in North Dakota," report to the North Dakota Department of Human Services, Division of Mental Health. Northhampton, MA.: Gemini Research, Ltd.
- Volberg, Rachel A. & Randall M. Steufan. 1994. "Gambling and Problem Gambling in South Dakota: A Follow-up Survey," report to Citizens Uniting for Gambling Reform. Northhampton, MA.: Gemini Research, Ltd.
- Volberg, R.A. 1995. "Wagering and Problem Wagering in Louisiana," report to the Louisiana Economic Development and Gaming Corporation. Northhampton, MA.: Gemini Research, Ltd.
- Volberg, R.A. 1995a. "Gambling and Problem Gambling in Iowa: A Replication Survey," report to the Iowa Department of Human Services. Northhampton, MA.: Gemini Research, Ltd.
- Volberg, R.A., M.G. Dickerson, R. Ladouceur & M.W. Abbott. 1996. "Prevalence Studies and the Development of Services for Problem Gamblers and Their Families," *Journal of Gambling Studies*. 12(2): 215-231.
- Volberg, R.A. 1997. "Gambling and Problem Gambling in Mississippi," report to the Mississippi Council on Compulsive Gambling. Social Science Report Series 97-1. Social Science Research Center, Mississippi State, University.
- Volberg, R.A. 1997a. "Gambling and Problem Gambling in Oregon," report to the Oregon Gambling Addiction Treatment Foundation. Northhampton, MA.: Gemini Research, Ltd.
- Volberg, R.A., W.L. Moore, E.M. Christiansen, W. Commings & S.M. Banks. 1988. "Unaffordable Losses: Estimating the Properties of Gambling Revenues Derived from Problem Gamblers." *Gaming Law Review*. 2(4): 349-360.
- Wallisch, L. 1996. "Gambling in Texas: 1995 Surveys of Adult and Adolescent Gambling Behavior," report to the Texas Commission on Alcohol and Drug Abuse.

Social Impacts of Problem Gambling

Previous Research

Research on the social impacts of problem gambling is limited because there are relatively few problem gamblers and they are difficult to identify. Household surveys similar to the one conducted in Montana are able to estimate the number of problem gamblers, but not detailed social impacts.

Surveys of Gamblers Anonymous members have been conducted in Connecticut, Illinois, and Wisconsin (Thompson 1996, Lesieur 1995, WEFA 1997). These were case studies, and they can not be extrapolated to the general population because they did not include a problem gambling screen (such as SOGS or DSM-IV) which would permit identification and comparison of problem gamblers with different levels of severity.

New Montana Research

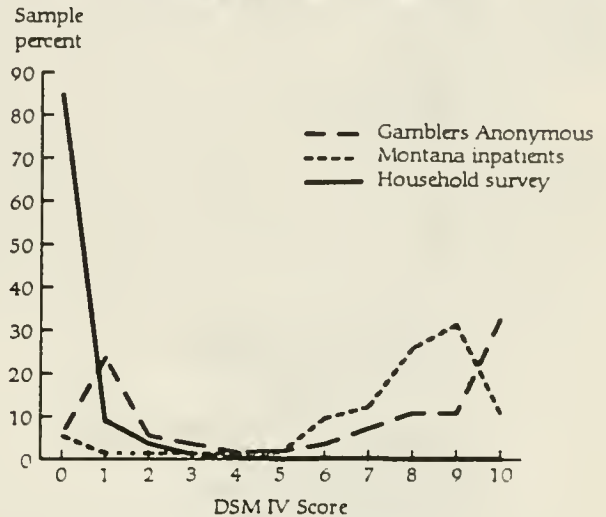
To provide some information concerning social costs of problem gambling, we conducted a survey of Montana Gamblers Anonymous (GA) members and reviewed patients' records from two residential gambling treatment programs. The GA survey was administered in Billings, Butte, Bozeman, Great Falls, Helena, and Missoula. Of the 77 questionnaires distributed, 61 (79 percent) were returned. GA members took the DSM-IV screen as part of the survey. The DSM-IV was also administered to respondents of the statewide household survey. The inpatients' records included scores on the DSM-IV screen.

GA and inpatients with a DSM-IV score of seven or above were chosen for the analysis of social impacts of problem gamblers. These persons can be described as extremely pathological gamblers. A cutoff of seven was chosen because:

- There are fewer false positives/negatives at this cutoff.
- There are sufficient numbers of gamblers for analysis (59 inpatients and 30 GA members).
- The DSM-IV group in the general population is more likely to resemble inpatient and GA peers at this cutoff.

The data in Figure 1 illustrate that the extremely pathological gamblers are a very small component of the population. For the household survey (which mirrors the overall population), only 10 percent score a one on DSM-IV and the percentage scoring seven or more is barely measurable. Most of the inpatients score seven or higher. GA membership contains a sizable number scoring low on the DSM-IV (perhaps because they are in "recovery") but the majority score seven or above.

Figure 1
Distribution of Gamblers by DSM-IV Score
(Percent of Total)



Source: Gemini Research, Ltd.

Problems of Montana's Extremely Pathological Gamblers

Table 1 presents profiles of the inpatient and GA extremely pathological gamblers. They show:

- Roughly equal gender distribution, which was also true for the problem and probable pathological gamblers in the household survey.
- GA members have about the same proportion of whites and non-whites as the general Montana population.
- GA members are older than inpatients, and both are older than problem and probable pathological gamblers in the general population.
- Nearly all GA members and inpatients have played VGMs.
- Inpatients are more likely than GA members to have sought help for alcohol problems and depression.
- Both inpatient and GA members are equally likely to have attempted suicide. The attempted suicide rate in both groups is substantially higher than for other addictive disorders and is similar to rates for depressive disorders, schizophrenia, and hereditary neurological disorders (Cox 1997).
- GA members and inpatients have similar arrest and domestic violence rates.
- GA members suffer greater financial impacts than inpatients. But, GA members may be less likely to have health insurance.

Table 4
Characteristics of Extremely Pathological Gamblers
Montana

<u>Category/Question</u>	<u>MT Inpatients</u> (N=59) %	<u>GA respondents</u> (N=30) %
<u>Gender</u>		
Male	58	47
Female	42	53
.....		
<u>Ethnicity</u>		
White	NA	83
American Indian	NA	7
Other	NA	10
.....		
<u>Age</u>		
18-24	3	4
25-34	27	23
35-44	43	23
45-64	21	50
.....		
<u>Lifetime Gambling Participation</u>		
Other Lottery(e.g. Powerball)	54	83
Gaming Machines in MT	98	97
Card Games in MT	44	33
.....		
<u>Co-Morbidity</u>		
Sought help for alcohol	41	20
Sought help for other drugs	16	20
Sought help for depression	64	50
Thought of suicide	80	93
Attempted/engaged in suicidal behavior	36	38
.....		
<u>Criminal Justice Impacts</u>		
Committed illegal act	NA	73
Arrested	44*	40
For DUI (1 or more)	22*	NA
For check fraud	10*	NA
For gambling related crimes	NA	17
Gambling related domestic violence	32*	33
.....		
<u>Financial Impacts</u>		
Used household money to gamble	88	97
Withdrawals from credit cards to pay for gambling	51	77
Bounced checks	73	70
Been in bankruptcy court	8*	25

*Inpatients voluntarily reported these consequences during treatment, but were not specifically asked by treatment staff.
Source: Gemini Research Ltd.

References

Cox, S., H.R. Lesieur, R.J. Rosenthal & R.A. Volberg. 1997. *Problem and Pathological Gambling in America: The National Picture*. Report prepared by the Research and Public Policy Committees of the National Council on Problem Gambling.

Lesieur, H.R. & C. Anderson. 1995. *Results of a Survey of Gamblers Anonymous Members in Illinois*. Park Ridge: Illinois Council on Problem and Compulsive Gambling.

Thompson, W.R., R. Gazel & D. Rickman. 1996. *The Social Costs of Gambling in Wisconsin*. Report to the Wisconsin Policy Research Institute. Vol. 9, No. 6.

The WEFA Group. 1997. *A study Concerning the Effects of Legalized Gambling on the Citizens of the State of Connecticut*. Report to the State of Connecticut Department of Revenue Services, Division of Special Revenue.

Gambling and Crime

The Issue and the Data

Are gambling and crime related? Clearly, as was previously reported, pathological gamblers are more likely to be involved in crime and more likely to be handled by the criminal justice system. But given their relatively small numbers, the overall impact on crime rates is likely to be small. In addition, much of the crime admitted by pathological gamblers involves drug use or driving under the influence of alcohol. It is quite possible that rather than pathological gambling "causing" criminal behavior, pathological gambling and criminal behavior are both the product of other problems in the person's life.

Two statistical tests were devised to analyze the relationship between gambling and crime in Montana. The first was a matched cities comparison, designed to determine if Montana cities with gambling had larger increases in reported crime rates over time compared to similar cities in the region with less access to gambling. The second was a cross-sectional analysis of Montana counties, designed to determine if counties with more gambling per capita also tend to have higher crime rates.

When analyzing the relationship between gambling and crime, it is important to remember that crime statistics must be interpreted cautiously because many crimes never come to the attention of the authorities and accuracy is often compromised by incomplete and/or inaccurate record keeping. Crime data on Montana American Indian reservations was not reported here because preliminary analysis of these data found serious problems with accuracy.

Throughout this report, crime is expressed as rates per 100,000. These rates are calculated by dividing the number of reported crimes in an area by the number of residents and multiplying the result by 100,000.

Findings from the Matched Cities Comparison

While gambling may have caused an increase of certain types of crime, Montana's overall crime rate increase is not any higher than the increases in matched cities with little or no legal gambling. In fact, in almost three-quarters of the specific comparisons carried out, crime rates rose more (or decreased less) in the matched cities than in the Montana cities.

Each of the seven largest Montana cities was matched with an out-of-state city in the region with similar population size, similar population growth rate, similar racial composition, but with little or no legal gambling. The percentage change in crime rates for three indices of crime (total serious crime, property crime, and violent crime) was computed for three time periods. Table 1

shows the matched cities, the comparison periods, and the crime categories included in the indices.

Because of some missing data, the city-crime-period combinations yielded 60 pair-wise comparisons of changes in crime rates. Figure 1 presents 14 examples that compare growth rates for violent and property crimes between 1984 and 1994. These charts illustrate the lack of a systematic pattern in crime rate changes between Montana cities and those in states with little or no gambling. For example, the violent crime rate grew faster in Cheyenne, Wyo., than in Great Falls between 1984 and 1994, yet the index of property crime decreased in Cheyenne while it increased in Great Falls during the same period.

Table 1
Matched Cities comparison

Montana Cities	Matched Cities
Billings	West Valley, UT
Great Falls	Cheyenne, WY
Missoula	Layton, UT
Butte	Murray, UT
Bozeman	Coeur d'Alene, ID
Helena	Roy, UT
Kalispell	Spanish Fork, UT

Time Periods

1984-88: Video gambling begins
1990-94: Video gambling expands
1984-94: Video gambling era

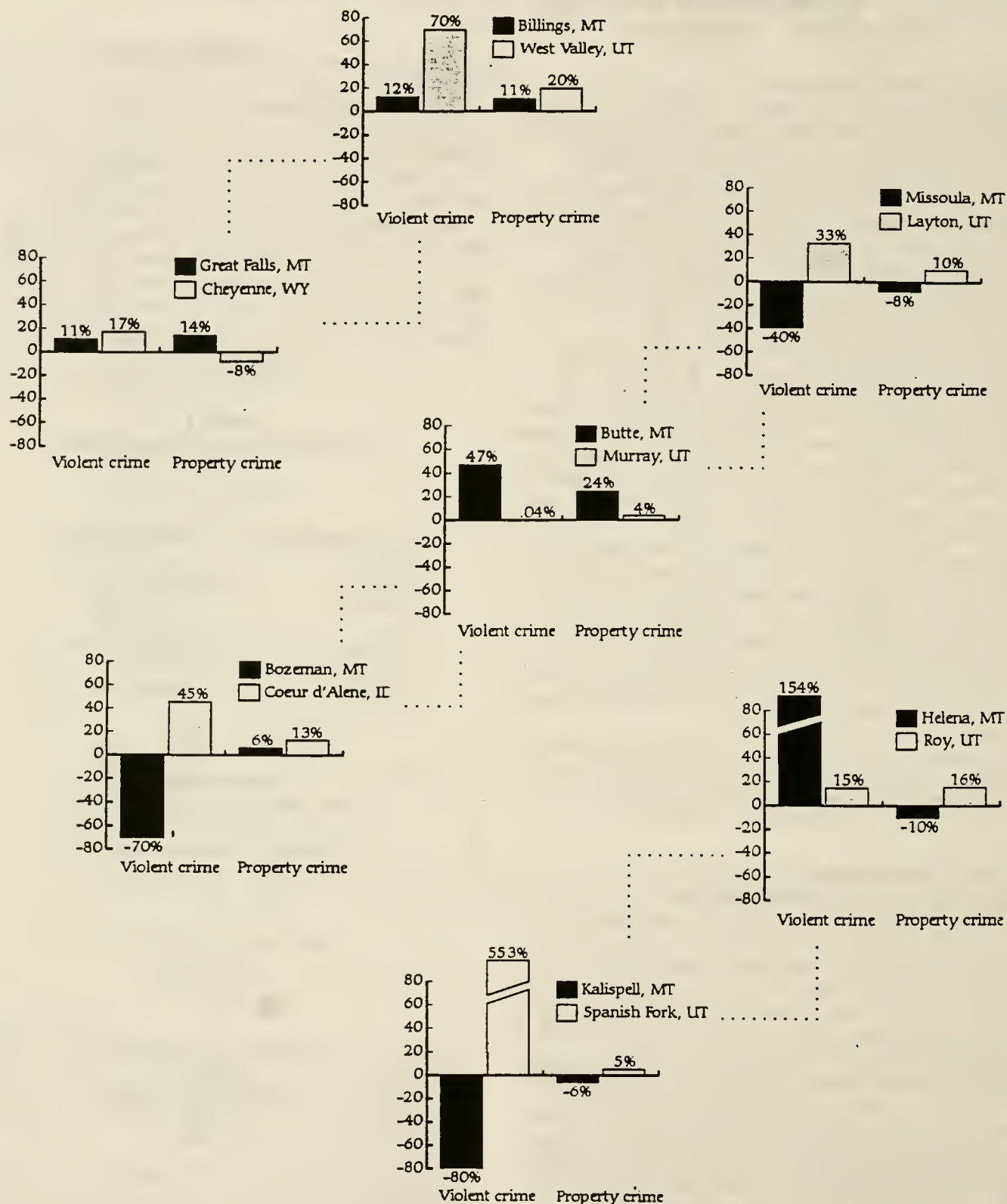
Index of property crime

Burglary
Larceny/theft
Motor vehicle theft

Index of violent crime

Murder
Aggravated assault
Rape
Robbery

**Percent Change in Crime Rates
Violent and Property Crime
1984-1994**



Sources: Montana Department of Justice; and Federal Bureau of Investigation, Uniform Crime Reports.

Findings from the Cross-sectional Analysis

For a few types of offenses, crime rates tend to be higher in those Montana counties with more gambling. Per capita VGM tax revenues are correlated in a statistically significant manner with the property crime index and rates of six other crimes: burglary, larceny-theft, robbery, vandalism, driving under the influence, and weapons offenses. These correlations held even when a number of other possible explanations were incorporated into the models and statistically controlled. Analysis showed that tax revenues are not correlated with the violent crime index or 16 other crime categories.

These findings are based on a regression analysis of counties in Montana. The amount of gambling in a county was measured using per capita VGM tax revenue. These figures do not include other forms of gambling.

Average reported crime rates for 1994 through 1996 were used to calculate indices of property and violent crime as well as rates of 24 specific crime categories. Table 2 shows the explanatory factors tested, the regression analysis results for the property and violent crime indices, and a listing of crimes that are correlated or not correlated with per capita VGM tax revenues.

The findings from the cross-sectional analysis suggest that a hypothetical statewide \$1 million increase in VGM expenditures (which were \$219 million in 1997) would be associated with about 17 more burglaries, approximately 78 more larcenies, roughly 25 more DUIs, 43 more acts of vandalism, 6 to 7 more weapons offenses, and 1 or 2 more robberies. The hypothetical \$1 million increase in VGM expenditures would increase VGM taxes by \$150,000 or about \$0.17 per capita.

Table 2
Cross-sectional Analysis

<u>Explanatory factors</u>	<u>Index violent crime</u>	<u>Index property crime</u>
VGM tax revenue per capita*	Not significant	Significant at .005
Population size	Not significant	Significant at .001
Percent population change	Significant at .01	Not significant
Ratio of males to females	Not significant	Not significant
Percent age 18-24	Not significant	Not significant
Percent Indian	Not significant	Not significant
Percent black	Not significant	Not significant
Percent Hispanic	Not significant	Not significant
Percent unemployed	Not significant	Not significant
Median household income	Not significant	Not significant
Bed tax per capita	Not significant	Not significant
R ²	.455	.745

*Measures gambling activity

Index violent crimes include: murder, forcible rape, robbery, and aggravated assault.

Index property crimes include: burglary, larceny-theft, and motor vehicle theft.

Gambling is correlated with:

Burglary (R² = .563)
Larceny-Theft (R² = .760)
Robbery (R² = .745)
Vandalism (R² = .492)
Driving Under the Influence (R² = .294)
Weapons Offenses (R² = .611)

Note: R² is a measure of statistical correlation.

Gambling is not correlated with:

Murder	Embezzlement
Rape	Stolen Property
Aggravated Assault	Prostitution
Simple Assault	Sex Offenses
Motor Vehicle Theft	Drug Offenses
Domestic Abuse	Illegal Gambling
Arson	Family Offenses
Forgery	Liquor Offenses
Fraud	Disorderly Conduct

Crime Costs

It is difficult to reliably estimate small increases in criminal justice system costs that might be associated with increased gambling. Given the large volume of crime presently handled by the justice system (e.g. about 5,000 burglaries, 33,000 larcenies, and 1,000 robberies in 1995) small increases in crime are not apt to have a significant impact on total justice system expenditures. Also, most reported crimes do not result in an arrest, only a fraction will result in a conviction, and very, very few will result in incarceration.

The estimated victim costs associated with a hypothetical \$1 million increase in VGM expenditures is at least \$32,250. This figure is based on the U.S. Department of Justice estimate that in 1992, the average burglary resulted in a net loss to the victim of \$834. The corresponding amount for larceny and robbery were \$221 and \$555. Victim cost estimates are not available for other types of crime. The \$32,250 figure is a likely a low estimate since it is based on reported crimes which represent less than half of serious crimes that actually occur.

Definitions

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Basic Industries

Basic industries are the major determinants of growth (or the lack of it) in Montana's economy. These industries depend heavily on markets outside the state or are otherwise influenced by factors that originate beyond the states borders. The major examples of basic industries are the natural resources industries—agriculture, mining, and wood and paper products. Other basic industries include nonresident travel (tourism), the federal government, railroads, and certain types of manufacturing. The labor income of workers in basic industries injects new funds into Montana's economy, which creates additional income as these dollars are spend and respend in this state.

DSM-IV

In 1994, the American Psychiatric Association changed the diagnostic criteria for identifying pathological gamblers. Pathological gambling has been defined as a progressive disorder characterized by a continuous or periodic loss of control over gambling; a preoccupation with gambling and with obtaining money with which to gamble; irrational thinking; and a continuation of the behavior despite adverse consequences (American Psychiatric Association 1994).

Since the publication of the DSM-IV, several researchers have started to develop screens for identifying problem and pathological gamblers on the basis of the new diagnostic criteria. The most widely used of these new screens is the Fisher DSM-IV Screen. Analysis of data from several states shows that the SOGS-R and the DSM-IV Screen are highly consistent and appear to measure the same thing.

In gambling surveys, respondents who score 3 or 4 points on the DSM-IV Screen are classified as "problem gamblers." Those who score 5 or more points are classified as "probable pathological gamblers" or, sometimes, as "severe problem gamblers."

Gambling and Gamblers

Gambling activities range from lottery drawings through bingo to wagering on horse races and sports events as well as table games and slot machines at casinos. Most gamblers participate in several activities. The majority prefer one or two of these activities. Some types of gambling (e.g. lottery games, slot machines) attract a wide range of players, while other types (e.g. horse race

wagering, bingo) appeal to relatively small groups in the population.

Gambling establishment

One of the 1,740 firms with a Montana gambling license.

Gambling expenditures

Consumer expenditures on gambling. Calculated as total wagers minus payouts.

Net margin

A measure of the financial condition of gambling establishments. Calculated as total revenue minus most costs. Includes return to owners (proprietors, partners, and stockholders), depreciation, and certain costs (such as promotions) not included elsewhere.

South Oaks Gambling Screen

The South Oaks Gambling Screen (SOGS) is a 20-item scale derived from the first psychiatric criteria for pathological gambling (American Psychiatric Association 1980). Weighted items on the SOGS concern highly specific behaviors, such as hiding evidence of gambling activity, arguments with family members over gambling, and borrowing money to gamble or to pay gambling debts. The scoring system for the SOGS was carefully developed to minimize the number of false positive cases, and the SOGS has been found valid and reliable in a variety of populations (Abbott & Volberg 1996; Lesieur & Blume 1987).

The original South Oaks Gambling Screen only assessed lifetime gambling-related difficulties. Since 1991, the screen (the SOGS-R) also assesses past year as well as lifetime gambling difficulties. Individuals who score 3 or 4 points on either the lifetime or past year screens are classified as "problem gamblers." Those who score 5 or more points on either screen are classified as "probable pathological gamblers."

VGM's

Video gambling machines. In Montana, includes video poker and video bingo/keno. In other states sometimes denoted as VLTs (video lottery terminal).

Technical Appendix

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Appendix A

Overall Trends in Montana Gambling	A1
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Appendix B

Household Survey Methodology	B1
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Appendix C

Gambling Establishment Survey Methodology	C1
---	----

Appendix D

Gamblers Anonymous and Inpatient Census Methodology	D1
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Appendix E

Household Questionnaire	E1
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Appendix F

Gambling Establishment Questionnaire	F1
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Appendix G

Gamblers Anonymous Questionnaire	G1
--	----

Appendix H

Inpatient Data Elements	H1
-------------------------------	----

Appendix I

Household Survey Frequencies	I1
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Appendix J

Gambling Establishment Survey Frequencies	J1
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Appendix K

Gamblers Anonymous Survey Frequencies	K1
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Appendix L

Crime Analysis Models	L1
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Appendix M

Household Survey Hypothesis Tests	M1
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Appendix N

UM ITRR Nonresident Visitor Survey Methodology	N1
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1. Introduction

The purpose of this study is to investigate the effects of various factors on the performance of a system. The study is organized as follows: Section 2 describes the methodology used in the study. Section 3 presents the results of the study. Section 4 discusses the implications of the findings. Section 5 concludes the study.

The methodology used in this study is a combination of experimental and analytical methods. The experimental method involves the use of a test system to measure the performance of the system under various conditions. The analytical method involves the use of mathematical models to predict the performance of the system.

The results of the study show that the performance of the system is significantly affected by the input parameters. The performance is highest when the input parameters are set to their optimal values. The performance is lowest when the input parameters are set to their non-optimal values.

The implications of the findings are that the performance of the system can be improved by optimizing the input parameters. This can be done by using the results of the study to determine the optimal values of the input parameters.

The study concludes that the performance of the system is significantly affected by the input parameters. The performance is highest when the input parameters are set to their optimal values. The performance is lowest when the input parameters are set to their non-optimal values.

Appendix A

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Overall Trends in Montana Gambling

Overall Trends in Montana Gambling

Introduction

One element of the Montana Gambling Impact Study is a review of the evolution of legal gambling internationally and of recent trends in Montana gambling legislation and industries. The purpose of this chapter is to place gambling in Montana within a regional, national and global context. Another purpose of this chapter is to place the particulars of legal gambling in Montana within historical and economic perspective.

In this chapter, we first present the sources of information we have used. Next, we discuss the expansion of legal gambling in the United States and present data on the availability of legal gambling. We then present a discussion of historical trends in Montana gambling. The majority of this information is in the form of legislative actions considered and passed by the Montana Legislature since 1970. Next, we examine economic trends in Montana gambling, including amount wagered on major types of gambling as well as state revenues. Finally, we examine Montana in relation to other states for specific gambling activities, including the pari-mutuel industry and video gambling.

Sources of Information

In searching the literature for information related to the scope and extent of the Montana gambling industry, several relevant sources were found. First and foremost is the trade journal for the gambling industries, *International Gaming and Wagering Business* (IGWB). Since 1994, IGWB has published an annual North American Gaming Report, which details the economic activity of every major gambling industry in North America on a state and provincial level. These industries include lotteries, the pari-mutuel industry, charitable games, and casinos. It is important to note that not all information is reported on a regular basis to IGWB. Nevertheless, the information that is available is a unique source for assessing the scope and extent of the gambling industries throughout North America.

Other sources of information used in developing this chapter are:

- the Request For Proposals distributed by the Montana Gambling Study Commission;
- the report, *Problem and Pathological Gambling in America*, prepared by the Research and Public Policy Committees of the National Council on Problem Gambling (Cox, Lesieur, Rosenthal & Volberg 1997);
- *Biennial Report, 1995-1996* of the Gambling Control Division, Montana Department of Justice and the Gaming Advisory Council;
- the report, *Gambling Involvement and Problem Gambling in Montana* (Volberg 1992a), prepared by Dr. Rachel Volberg for the Montana Department of Corrections and Human Services; and

- the report, *Treatment of Pathological Gamblers in Montana: Past, Present and Future* (Volberg 1992b), prepared by Dr. Rachel Volberg for the Montana Department of Corrections and Human Services.

The Expansion of Gambling in the United States

In the United States in 1976, when the Commission on the Review of the National Policy Toward Gambling issued its final report, only 13 states had lotteries, only 2 states (Nevada and New York) had approved off-track wagering and there were no casinos outside of Nevada. The Commission (1976) estimated that the total volume of money legally wagered on gambling in 1974 was \$17 billion or about 1% of United States personal income. Legal gaming revenues amounted to approximately \$3 billion annually. By 1996, the amount wagered legally on gambling in the United States had reached \$586 billion or 9% of United States personal income while legal gaming revenues had mounted to \$47 billion (Christiansen 1997). In just twenty-two years, revenues from legal wagering in the United States have grown by nearly 1,500%.

Casino gambling, once confined to Nevada and Atlantic City, has spread rapidly, partly in response to the need for additional revenues for local and state governments, but also as a result of the Indian Gaming Regulatory Act of 1988. The earliest efforts to legalize casinos outside of Nevada and Atlantic City came in South Dakota and Colorado, where small-stakes casino gambling for the purpose of historic preservation was approved by referendum in several old mining towns. While the stakes may be small, the impact on these towns has been enormous, with sky-rocketing property values, conversion of many businesses to casinos, increased traffic and increased crime (Long, Clark & Liston 1994; Stowkowski 1996).

Riverboat casinos spread rapidly in the 1990s. The first riverboats, legalized in Iowa in 1991, placed strict limits on both wagers and losses. As riverboat casinos were legalized in other states, including Illinois, Indiana, Louisiana, Mississippi and Missouri, these limits were lifted. While these casinos must be located on facilities that look like boats, few of the riverboats actually leave shore. In Mississippi, as well as in Iowa where the earlier restrictions have been eliminated, the term "dockside gambling" is a more accurate description than "riverboat gambling."

Finally, the Indian Gaming Regulatory Act created a regulatory structure for gambling on Native American lands throughout the United States. By establishing a framework for negotiation between the sovereign tribes and state governments, Congress opened the door for American Indian tribes to establish casino-style gambling in any state where charitable or social gambling is permitted (Eadington 1991). In 1996, there were hundreds of American Indian gaming operations, including full-service casinos, large-scale bingo operations and several table-game only operations on American Indian reservations in 30 states (McQueen 1997).

Since the mid-1960s, 37 states and the District of Columbia have implemented lotteries on which they rely to fund government services. With cutbacks in federal spending, pressures on state lotteries to provide revenues for government programs have increased. State lotteries now offer a multitude of games that blur the boundaries between their traditional products and other types of gambling, including instant or

scratch tickets, daily numbers games, and electronic gaming devices offering keno, poker and line games similar to slot machines at casinos.

In contrast to lotteries and casinos, the pari-mutuel industry has struggled to compete in a vastly expanded gambling environment. Racetracks have sought relief from taxation from state legislatures and have also sought to expand their activities. Initially, racetracks worked to increase access to their traditional product by establishing off-track betting systems and broadcasting races from other tracks at their facilities. More recently, racetracks have sought to compete by offering other types of gambling. In California, several racetracks now have card rooms where patrons may wager on poker and other games. In Delaware, Iowa and West Virginia, racetracks have been permitted to add electronic gaming machines to their traditional products with excellent results for their bottom line.

Technological innovations of the 1990s and the 21st Century have the potential to change gambling in many ways. These include "cashless" gambling in which wagering is done with credit or debit cards, home access in which cable television will bring satellite wagering into the home, and the use of interactive television. Several airlines already offer interactive gambling during international flights. Finally, there is the prospect of lottery games, sports wagering and casino gambling on the Internet. There are now approximately 40 sites on the Internet where anyone with a computer, a modem and Internet access can wager on lotteries, card games, slot machines and sports.

The technological innovation with the greatest impact on gambling to date has been the electronic gaming device (also known as video lottery terminals, VLTs, or video poker). Like other technological advances in the gambling field, electronic gaming devices have generally been introduced without any attempt to assess potential harm to participants. There are now twenty-one states, including Montana, where electronic gaming devices are widely available (McQueen 1996).

The Growing Opposition to Gambling

Much of the initiative for gambling legalization throughout the United States and Canada in the 1970s and 1980s stemmed from the reluctance of governments to raise taxes. Legislators often took measures to earmark funds from newly legal forms of gambling for specific purposes: education, property tax relief, services for seniors. In the mid-1990s, grassroots opposition to legal gambling began to emerge as coalitions of citizens' groups formed to prevent or repeal these increasingly ubiquitous activities.

One consequence of the expansion of gambling has been a growing opposition to gambling legalization. The two types of gambling that have attracted the most opposition, before and after their implementation, have been casinos and electronic gaming devices. For the most part, the opposition consists of grassroots efforts at the local and state level. Interesting coalitions among conservative and liberal groups have formed in many states and provinces to prevent the establishment or expansion of gambling in their communities.

Local community and citizens' groups have been particularly effective in working to limit the availability of electronic gaming devices. In Nova Scotia and New Brunswick, thousands of video poker machines have been summarily removed from non-licensed establishments (Canadian Press 1998). In Alberta, the provincial government recently

held a summit conference to debate the question of how to regulate the availability of widespread video poker machines (Volberg 1998).

Throughout the United States, efforts to establish new types of gambling or alter the conditions under which existing types of gambling operated have been defeated in recent elections (Doocey 1996). In South Dakota, several elections have included referenda to repeal video lottery terminals (Doocey 1994). In a recent statewide referendum, many parishes in Louisiana voted to ban video poker machines. In South Carolina, legislative efforts are underway to ban video gambling throughout the state. In Las Vegas, the mayor has asked a panel to consider removing slot and video-poker machines from neighborhood businesses (Novak 1998).

While these actions suggest that some Americans feel that there is far too much gambling available, it is unclear at what point the American public will have enough gambling. Per capita expenditures on legal gambling in the United States have risen from \$164 in 1992 to \$245 in 1996 (Christiansen 1993, 1997). While comparisons with other countries suggest that saturation is a long way off, there are increasing efforts to develop more and better information about the positive and negative impacts of legal gambling at the local, state and even the national level.

Trends in the evolution of legal, commercial gambling follow similar patterns in countries besides the United States. These include the establishment of lotteries and casino-style gambling in many countries. Since the 1970s, lotteries and casinos have become well-established in Europe, North America, Australia, Asia and Africa. In the 1990s, emerging international trends include the establishment of urban or city-centered casinos that appeal to local gamblers as well as tourists and the widespread availability of electronic gaming devices. Clearly, the issues facing the citizens and Government of Montana in relation to legal gambling are the same issues facing many other citizens and governments in countries throughout the world.

Forms of Legal Gambling in the United States

Table 1 lists the legal gambling activities that are currently available in the each state. An explanatory legend appears at the end of the table.

Table 1: Types of Legal Gambling in the United States in 1997

State	Bingo	Casino	Video Gaming	Lottery	Pari-mutuel	Offtrack
		*	**	***	****	*****
Alabama	X				X	X
Alaska	X					
Arizona	X	X		X	X	X
Arkansas					X	X
California	X			X	X	X
Colorado	X	X		X	X	X
Connecticut	X	X		X	X	X
Delaware	X		X	X	X	X
DC	X			X		
Florida	X			X	X	X
Georgia	X			X		
Hawaii						
Idaho	X			X	X	X

Illinois	X	X		X	X	X
Indiana	X	X		X	X	X
Iowa	X	X		X	X	X
Kansas	X	X		X	X	X
Kentucky	X			X	X	X
Louisiana	X	X	X	X	X	X
Maine	X			X	X	X
Maryland	X			X	X	X
Massachusetts	X			X	X	X
Michigan	X	X		X	X	X
Minnesota	X	X		X	X	X
Mississippi	X	X				
Missouri	X	X		X	P	X
Montana	X	X	X	X	X	X
Nebraska	X	X		X	X	X
Nevada	X	X	X	X	X	X
New Hampshire	X			X	X	X
New Jersey	X	X		X	X	X
New Mexico	X	X		X	X	X
New York	X	X		X	X	X
North Carolina	X	X				
North Dakota	X	X			X	X
Ohio	X			X	X	X
Oklahoma	X				X	X
Oregon	X	X	X	X	X	X
Pennsylvania	X			X	X	X
Rhode Island	X		X	X	X	X
South Carolina	X		X			
South Dakota	X	X	X	X	X	X
Tennessee					A	A
Texas	X			X	X	X
Utah					N	
Vermont	X			X	X	A
Virginia	X			X	A	A
Washington	X	X		X	X	X
West Virginia	X		X	X	X	X
Wisconsin	X	X		X	A	X
Wyoming	X				X	
Puerto Rico	X	X		X	X	X
Virgin Islands		A		X	X	X

X Legal and operative

P Permitted by law and previously operative

I Implemented since June 1995

A Authorized but not yet implemented

N Operative, but no pari-mutuel wagering

• Includes Indian Reservations

.. Includes video offerings of lottery, bingo, poker and keno

... Includes Keno, instant pull-tabs, lotto, numbers, and passives

.... Includes greyhounds, jai-alai, harness racing, quarterhorse and thoroughbred racing.

***** Includes interstate intertrack, intrastate intertrack, off-track betting, race/sportsbook, and telephone betting

Source: International Gaming and Wagering Business, September 1997

Historical Trends in Montana Gambling

This section offers a brief description of significant legislative and judicial milestones. It does not include all gambling-related legislation in Montana in this period but instead highlights key events.

- 1972: Delegates to the state Constitutional Convention vote to discontinue an outright constitutional ban on gambling and instead authorizes the legislature to determine which types of gambling would be legalized. Consequently, Article III, Section 9 of the Montana Constitution reads as follows: "All forms of gambling, lotteries and gift enterprises are prohibited unless authorized by acts of the legislature or by the people through initiative or referendum." Subsequent legislation legalizes bingo, raffles, sports pools, and certain card games.
- 1976: The Montana Supreme Court holds that keno is a form of bingo, thus declaring electronic keno to be a legal form of gambling.
- 1982: A citizen's initiative to legalize slot machines, punchboards, pull tabs and blackjack is defeated by a 62-38 percent margin.
- 1985: The Montana Legislature authorizes bars to have up to five video poker machines and unlimited numbers of keno machines on premises. As a result, Montana is the first state to permit video gambling machines in bars.
- 1986-88: Montana voters approve a lottery by initiative (69-31 percent); the Montana legislature establishes the Montana State Lottery and assigns administrative responsibility to the Department of Commerce. The legislature also enacts a 15 percent tax on the net income of video gambling machines. Two-thirds of the revenue generated by the tax is retained by local governments; the remaining third goes to the state general fund.
- 1989: The Montana Legislature decides to consolidate gambling regulation in the Department of Justice, which in turn establishes the Gambling Control Division, which has statutory authority to adopt administrative rules, license operators and machines, collect and distribute taxes, test and approve machines, and enforce state gambling laws. Another measure passed allows betting on simulcast out-of-state horse races; administrative authority rests with the Board of Horseracing, which is attached to the Department of Commerce.
- 1991: The Montana Legislature increases the total number of video gambling devices per liquor license to twenty (20) and rejects a bill to allow blackjack.
- 1990s: The State of Montana enters into compacts under federal Indian Gaming Regulatory Act (IGRA) with the Assiniboine and Sioux Tribes (Fort Peck Reservation), the Crow Tribe, the Chippewa-Cree Tribes (Rocky Boy Reservation) and the Northern Cheyenne. Compacts with the Confederated Salish and Kootenia Tribes (Flathead Reservation) and the Blackfeet Tribe are negotiated, but are not finalized or put into force because of intergovernmental conflicts. Tribal compacts allow larger video machine jackpots (up to \$1000) and more machines per premise (100), primarily because of the reservations' relative isolation and the absent tie to liquor licenses.
- 1993: The Montana Legislature passes a law prohibiting cashing of paychecks in gambling establishments. 1993-94: The Legislative Auditor's Report on the Gambling Control Division reveals inconsistencies in tax accounting and raises questions about the accuracy of the state's method of determining and collecting revenue from gambling machines. The report recommends an automated

system for reporting and accounting or, alternatively, a sizeable increase in division staff.

- 1995: A bill to establish automated system (aka "dial-up") is defeated, as is another to establish a Gaming Trust Fund for the treatment of gambling addiction. The legislature authorizes an increase in video poker payouts from the previous statutory limit of \$100 to \$800. A separate successful bill prohibits the 'stacking' of liquor/gambling licences (i.e., the configuring of gambling establishments to effectively allow more than 20 machines on the premises).
- 1997: A bill prohibiting credit gambling is enacted; another to restrict the placement of automated teller machines in gambling establishments is defeated. Repeat measures to establish and fund programs for problem/pathological gamblers and to implement electronic monitoring of video gambling machines for revenue and other accounting purposes fail.

Economic Trends in Montana Gambling

Until 1993, there was no publicly available collection of state-by-state gambling revenues. Since 1993, the trade journal, *International Gaming and Wagering Business* (IGWB), has compiled data on gaming receipts and revenues for all of the North American states and provinces as well as for Australia and New Zealand. This section focuses on the economic trends of gambling in Montana, with additional information provided for contiguous states. In the particular cases of Powerball and video lottery terminals (VLTs), information is presented for those states which have similar products.

Montana Gambling Products

In this section, we identify the products in the Montana gambling market and present information concerning gross sales, gross receipts, and state revenues from 1993 to 1996. Information on gross gambling revenues in Montana included in the IGWB annual reviews include:

- the Montana Lottery;
- the Gambling Control Division, Montana Department of Justice; and
- the Board of Horse Racing, Montana Department of Commerce.

It is important to note that, since Indian gaming operations are not public entities, it is extremely difficult to obtain information about their receipts or revenues. Certainly, there is no financial information about Indian gaming operations in Montana reported in the IGWB. Table 2 presents the amount wagered on Montana gambling products from 1993 to 1996. Information in this table is a compilation of IGWB data and that from the Montana Gaming Control Division Biennial Report.

Table 2: Amount Wagered on Montana Gambling Products, 1993-1996

Gambling Product	1993	1994	1995	1996
Lottery				
Powerball	18,525,696	18,490,854	14,511,669	14,167,404
Lotto	9,130,701			

Tri-West Lottery		2,414,585	5,188,191	5,104,846
Montana Cash		8,732,596	5,776,857	6,157,537
Instant	9,106,433	7,844,749	7,281,701	6,331,627
Commercial/ Charitable Games				
Video Games	397,500,000	488,500,000	509,700,000	523,400,000
Bingo/Keno	N/A	14,000,000	13,500,000	11,800,000
Card Rooms	N/A	N/A	N/A	N/A
Sports Tabs	N/A	N/A	N/A	N/A
Parimutuel				
Horse Racing	9,316,361	10,245,717	9,383,951	8,319,098
Grayhounds			323,209	1,348,867
Total Sales/Receipts	443,597,191	550,228,501	565,665,578	576,629,379

The abbreviation N/A means the data was not available or not reported.

Several observations can be made from the data presented in Table 2. First, with the exception of the Tri-West Lottery, gross revenues for Montana lottery products have declined steadily since 1993. Like the Montana Lottery, receipts from horse race wagering have declined since 1993. For simplicity, on-track, inter-track and off-track racing activities have been summed in Table 2. The video game market in Montana (including keno, poker, and bingo games) constitutes approximately 90% of the total Montana gambling market in 1993, increasing to 92% in 1996. The relative size of the video gaming market compared to other gambling products in Montana is similar in other states that offer these devices. The United States video gaming market is examined below.

Revenues from lottery products are reported directly in the IGWB; revenues for commercial/charitable games were calculated as the sum of tax and permit revenue; and revenues for the pari-mutuel industry were calculated as a percentage of the total amount wagered as reported in the IGWB.

Table 3: State Revenues From Montana Gambling Products, 1993 – 1996

Gambling Product	1993	1994	1995	1996
Lottery (Total)	19,020,313	19,334,294	16,806,566	15,847,114
Commercial Games				
Video Games	29,803,338	33,135,337	34,589,982	35,586,723
Bingo/Keno	56,237	51,728	49,584	46,271
Card Rooms	83,250	79,500	83,000	80,000
Sports Tabs	2,160	5,328	2,448	859
Parimutuel				
Horse Racing	158,378	153,686	150,413	83,191
Greyhounds			5,171	13,488
Total	49,121,676	52,759,873	51,487,164	51,657,646

Two general observations can be made based on the data in Table 3. First, losses in lottery revenue were made up by increases in revenues from video games. Second, revenues for the pari-mutuel industry and commercial/charitable games other than video games have remained relatively stable, with the exception of sports tabs.

Comparing Montana with Surrounding States

This section compares the gambling economy of Montana with the surrounding states of South Dakota, North Dakota, Idaho and Wyoming. Table 4 presents information on the gross sales of gambling products in Montana and surrounding states. While information for the Canadian provinces of Alberta, Manitoba and Saskatchewan is available, the provinces only report net sales rather than gross sales and are therefore not directly comparable with data from the United States.

Table 4 : Gross Sales of Gambling Products in Montana and Surrounding States, in Millions Of Dollars

State	1993	1994	1995	1996
South Dakota	829.3	802.6	860.1	997.4
Montana	443.6	550.2	565.7	576.6
North Dakota	228.3	282.0	288.8	293.0
Idaho	93.4	124.2	139.4	135.9
Wyoming	11.9	11.3	12.1	9.7

Both Montana and South Dakota are full-service gambling markets with a wide range of products including lottery games, charitable games, commercial bingo and video games, card rooms, Indian casinos and Indian bingo. The wide availability of gambling is reflected in the size of the gambling markets in Montana and South Dakota compared to the other states in Table 4. In contrast to Montana, for example, Wyoming only offers charitable gaming, Indian bingo, and pari-mutuel wagering.

The Pari-mutuel Industry

The pari-mutuel industry, and horse racing in particular, has a long and rich tradition in the United States. In the 1970s and 1980s, the pari-mutuel industry expanded to include jai-alai, greyhound racing, and harness and quarterhorse racing as well as thoroughbreds. In the 1990s, many racetracks have introduced electronic innovations such as inter-track wagering, off-track wagering, and telephone betting. Despite these innovations, the pari-mutuel industry has been an industry in decline, heavily reliant on an aging player base and increasingly in competition with new, more exciting forms of wagering.

This section presents information from IGWB to examine trends in pari-mutuel wagering in Montana and the surrounding region. Table 5 presents the total amount wagered ("the handle") for the pari-mutuel industries in Montana and surrounding states.

Table 5: Total Handle for the Pari-Mutuel Industries of Montana and Surrounding States

State	1993	1994	1995	1996
Idaho	36,611,034	46,135,478	45,151,591	37,709,831
Montana	9,316,361	10,245,717	9,707,160	9,667,995
N. Dakota	7,052,352	7,096,702	4,410,528	5,230,368
S. Dakota	9,886,435	9,380,361	7,822,044	9,244,603
Wyoming	11,808,762	11,253,702	12,088,871	9,725,245

Table 5 clearly demonstrates the static or declining nature of the pari-mutuel industry in Montana and the surrounding region. Efforts to bolster the pari-mutuel industry in the United States include bringing video gaming devices or slot machines to the tracks, with positive results in the three states (Delaware, Maryland, West Virginia) that have tried it.

Table 6 presents information on revenues to state governments generated by the pari-mutuel industries in Montana and surrounding states. Even more dramatically than the figures for handle, these figures illustrate the declining ability of the pari-mutuel industry to generate revenues.

Table 6: State Revenues Generated from the Pari-Mutuel Industry for Montana and Surrounding States, 1993-1996

State	1993	1994	1995	1996
Idaho	0.00	1,153,386	1,038,486	829,616
Montana	158,378	153,685	155,314	96,679
N. Dakota	186,182	184,514	119,084	109,837
S. Dakota	444,889	0.00	0.00	0.00
Wyoming	177,131	168,805	181,333	145,878

Video Gambling in the United States

In an effort to expand gambling markets, jurisdictions throughout North America have introduced instant lottery games and electronic gaming devices. Electronic gaming devices offer a variety of games, including lottery products, bingo, poker, keno and slot or line games. It is important to note that Montana is the only state among those included in Table 7 that does not own and operate video gaming machine routes directly.

Table 7: Gross Sales/Receipts of Video Gaming Devices in the United States, 1993-1996 (\$Millions)

State	1993	1994	1995	1996
Delaware	—	—	—	895.4
Montana	397.5	445.1	464.4	523.7
Oregon	1,548.4	2,211.8	2,983.2	3,285.1
Rhode Island	32.7	76.7	192.0	314.9
S. Carolina	—	—	—	1,025.9
S. Dakota	392.0	444.7	343.5	490.2
W. Virginia	39.9	47.8	328.8	556.4

Table 7 illustrates the significant increases in gambling markets associated with the introduction of video gaming devices. The cases of South Carolina and Delaware, where machines were only introduced in 1996, demonstrate the latent demand for this type of gambling as well as the opportunities for revenue generation associated with their introduction.

Table 8 presents information about gross revenues from video gambling devices in different states. Gross revenues represent somewhat different things in different jurisdictions because of the manner in which video gambling is licensed and operated. In Delaware, Oregon, Rhode Island, South Dakota and West Virginia, video gambling is operated by the state lottery. In Montana and South Carolina, video gambling is licensed and regulated by the state but operated privately.

Table 8: Gross Revenues of Video Gaming Devices in the United States, 1993-1996

State	1993	1994	1995	1996
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Delaware	—	—	—	77.1
Montana	29.8	33.1	34.5	35.6
Oregon	172.2	247.0	331.1	355.7
Rhode Island	16.4	27.6	57.0	86.6
S. Carolina	—	—	—	292.7
S. Dakota	142.3	163.5	126.1	175.5
W. Virginia	4.7	5.6	28.1	47.2

Analysis of the data in Table 7 and Table 8 shows wide variation in the relationship between gross sales or receipts and gross revenues from video gambling devices. In 1996, this ranged from a high of 31% in West Virginia to a low of 7% in Montana. However, while gross revenues in Montana represent the total amount received by the state from this activity, gross revenues in Delaware, Oregon, Rhode Island, South Dakota and West Virginia represent the amount received by the amount received by the state before lottery operating expenses are paid. In South Carolina, gross revenues flow directly to operators and revenues to the state are not provided.

Summary

To place legal gambling in Montana in international, national and regional perspective, we examined historical and economic trends in legal gambling. The evolution of legal gambling in Montana is part of a larger social and economic pattern that is taking place throughout the world as attitudes toward legal gambling shift and as governments search for alternatives to fund important social programs.

As in other jurisdictions, casinos and widespread electronic gaming devices represent the most important elements of the legal gambling industry in Montana. Pari-mutuel wagering is an industry in decline in Montana, just as it is elsewhere in North America. Growing concerns about the potentially negative impacts of legal gambling have led to growing opposition to legal gambling in Montana as well as to this effort to address the full range of issues associated with the availability of legal gambling in Montana.

From an economic perspective, it is clear that video gambling in Montana dominates the legal gambling market. Revenues for all other types of gambling in Montana have remained static or declined since 1993. While video gambling dominates the legal gambling market in Montana, it is clear that other states with video gambling receive a larger proportion of the overall revenues generated by this type of gambling.

Bibliography

- Abt, V., J. F. Smith & E. M. Christiansen. 1985. The Business of Risk: Commercial Gambling in Mainstream America. Lawrence: University Press of Kansas.
- American Gaming Association. 1998. "Update: An Industry-wide Effort to Combat Problem Gambling," International Gaming & Wagering Business 19 (6): 10.
- Bamhart, R. T. 1992. "Gambling in Revolutionary Paris: The Palais Royale, 1789-1838," Journal of Gambling Studies 8 (2): 151-166.
- Becofia, E. 1996. "Prevalence Surveys of Problem and Pathological Gambling in Europe: The Cases of Germany, Holland and Spain," Journal of Gambling Studies 12 (2): 179-192.
- Bivins, J. & J. Hahnke. 1998. The New Path to Profits: Technology Strategies for the Gaming Industry. Special Supplement to International Gaming & Wagering Business. Sponsored by KPMG Peat Marwick. (June 1998).
- Brown, R. I. F. & S. E. Fisher. 1996. The Social Implications of Casino Gambling. London: The Home Office.
- Bureau of Indian Affairs. 1998. "The Tribal State Compact List." Tribal information for those with approved tribal state compacts as of September 2, 1997. www.doi.gov/bia/foia/compact.htm. Accessed July 21, 1998
- Christiansen, E. M. 1993. "1992 Gross Annual Wager: Industry Rebounds with 8.4% Handle Gain," Gaming & Wagering Business 14 (7): 12-35.
- Christiansen, E. M. 1997. "The United States 1996 Gross Annual Wager: U.S. Gaming Faces New Growth Challenges," International Gaming & Wagering Business 18 (8). Supplement.
- Clotfelter, C. T. & P. J. Cook. 1989. Selling Hope: State Lotteries in America. Cambridge: Harvard University Press.
- Commission on the Review of the National Policy Toward Gambling. 1976. Gambling in America. Washington, DC: Government Printing Office.
- Connor, M., J. Kelly & R. T. Parets. 1996. Slot Machines: The Next Generation. Special Supplement to International Gaming & Wagering Business. (May 1996).
- Cox, S., H. R. Lesieur, R. J. Rosenthal & R. A. Volberg. 1997. Problem and Pathological Gambling in America: The National Picture. Report prepared by the Research and Public Policy Committees of the National Council on Problem Gambling.
- Dickerson, M. G. 1993. "Internal and External Determinants of Persistent Gambling: Problems in Generalising from One Form of Gambling to Another," Journal of Gambling Studies 9 (3): 225-245.
- Doocey, P. 1996. "United States: Gaming Scores in Michigan and Arizona," International Gaming & Wagering Business 17 (12): 1, 4.

Eadington, William R. 1991. "Public Policy Considerations and Challenges and the Spread of Commercial Gambling." In Gambling and Public Policy: International Perspectives, W. R. Eadington & J. A. Cornelius (eds). Reno: University of Nevada Press.

Findlay, J. M. 1986. People of Chance: Gambling in American Society from Jamestown to Las Vegas. New York: Oxford University Press.

Gabriel, K. 1996. Gambler Way: Indian Gaming in Mythology, History and Archaeology in North America. Boulder, CO: Johnson Books.

Hermkens, P. & I. Kok. 1991. "Gambling in the Netherlands: Development, Participation and Compulsive Gambling." In Gambling and Public Policy: International Perspectives, W. R. Eadington & J. A. Cornelius (eds). Reno: University of Nevada Press.

Heubusch, K. 1997. "Taking Chances on Casinos," American Demographics.
http://www.demographics.com/publications/ad/97_ad/9705_ad/ad970530.htm

International Gaming & Wagering Business. 1998. "Australia: MegaSports gets Internet license," International Gaming & Wagering Business 19 (6): 9.

Kelly, J. 1998. "Australia: Two states tackle Internet games," International Gaming & Wagering Business 19 (4):11.

Kent-Lemon, N. 1998. "Global View: Cities and Slots are the Future," International Gaming and Wagering Business 19 (4): 34-35.

Long, P., J. Clark & D. Liston. 1994. Win, Lose or Draw? Gambling with America's Small Towns. Washington DC: The Aspen Institute, Rural Economic Policy Program.

McQueen, P. A. 1997. "North American Gaming at a Glance," International Gaming & Wagering Business 18 (9): 18-20.

McQueen, P. A. 1997. "Special Report: Gaming on the Internet: Lottery. Bordering on Growth," International Gaming & Wagering Business 18 (4): 55.

Montana Department of Justice, Gambling Control Division & Gaming Advisory Council. Biennial Report, 1995-1996.

National Opinion Research Center. 1998. National Survey and Community Database Research on Gambling Behavior. RFP #NGISC-R-001 Technical Proposal. Submitted to the National Gambling Impact Study Commission. (February 1998).

North American Gaming Report. 1997. International Gaming & Wagering Business. Supplement. (Volume 18, No. 7).

O'Hara, John. 1987. "'Getting a Stake': Gambling in Early Colonial Australia," Journal of Gambling Behavior 3: 41-59.

The Promus Companies. 1996. The Harrah's Survey of Casino Entertainment. Report of the Promus Companies.

Rose, I. N. 1986. Gambling and the Law. Hollywood, CA: Gambling Times Incorporated.

Rose, I. N. 1995. "Gambling and the Law: Endless Fields of Dreams," Journal of Gambling Studies 11 (1): 15-33.

Rosecrance, J. 1988. Gambling Without Guilt: The Legitimation of an American Pastime. Belmont, CA: Wadsworth.

Scripps Howard News Service & Ohio University. Recent Bush Center Research Projects: Gambling. <http://www.scripps.ohiou.edu/research.htm#gamble>. Accessed February 6, 1998.

Sinclair, S. 1997. "By the Numbers: Internet Casino Growth Predicted," International Gaming & Wagering Business 18 (3): 17.

Sinclair, S. 1998. "By the Numbers: Cybergaming's Limited Market," International Gaming & Wagering Business 19 (3): 12.

Stowkowski, P. A. 1996. Riches and Regrets: Betting on Gambling in Two Colorado Mountain Towns. Niwot, CO: University Press of Colorado.

Thompson, W. N. 1997. Legalized Gambling: A Reference Handbook. Santa Barbara, CA: ABC-CLIO.

Volberg, R. A. 1992. Gambling Involvement and Problem Gambling in Montana. Report to the Montana Department of Corrections and Human Services.

Volberg, R. A. etc. 1992. Treatment of Pathological Gamblers in Montana: Past, Present and Future. Report to the Montana Department of Corrections and Human Services.

Volberg, R. A., D. C. Reitzes & J. Boles. 1997. "Exploring the Links Between Gambling, Problem Gambling and Self-Esteem." Deviant Behavior 18: 321-342.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes the need for transparency and accountability in financial reporting.

2. The second part of the document outlines the various methods and techniques used to collect and analyze data. It includes a detailed description of the experimental procedures and the statistical analysis performed.

3. The third part of the document presents the results of the study. It includes a series of tables and graphs that illustrate the findings of the research. The data shows a clear trend of increasing activity over time.

4. The fourth part of the document discusses the implications of the findings. It suggests that the results have significant implications for the field of research and may lead to further developments in the future.

5. The fifth part of the document concludes the study. It summarizes the main findings and provides a final statement on the importance of the research.

Appendix B

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Household Survey Methodology

Household Survey Methodology

Questionnaire Design and Testing

The household questionnaire was adapted from a questionnaire provided by Gemini Research. This questionnaire has been used in several states including the previous Montana study in 1992. The questionnaire was modified to gather information specifically for Montana. These modifications were made with input from the Montana Gambling Study Commission.

The preliminary questionnaire was programmed for Computer-Assisted Telephone Interviewing (CATI) and a sample of 39 respondents interviewed in a field test. The field test was used to refine questions and test the CATI instrument. The final questionnaire may be found in Appendix E.

Interviewer Training

Experienced interviewers from the Bureau of Business and Economic Research (BBER) Survey Research Facility were invited to a special training session. This session concentrated on techniques for asking sensitive questions. Some interviewers did not participate in the final study because they were uncomfortable asking these questions. The training session included mock interviews to test interviewer techniques. Mock interviews identified interviewers that might have trouble with the survey. The interviewers who did not meet standards after training were assigned to other projects.

Sampling Frame for the General Household Survey

The BBER generated a random sample of Montana households with telephones using a Random-Digit Dialing (RDD) process. Since each number was randomly generated, the interviewer knew nothing about the telephone number; it could be non-working, a FAX number, a business, or a household. This method of generating a sample includes unlisted phone numbers. Other methods are not able to include unlisted telephone numbers as efficiently.

Each telephone number was attempted numerous times. Attempts were made on weekends, evenings and daytime. These varied attempts allow households with differing composition to be interviewed. Once a household was contacted, a selection procedure using a Kish grid (Kish 1949) was used. This selection procedure ensures random selection within multiple person households.

If the selected respondent was not available, appointments were made to reach the selected person. Of all households contacted, only four respondents were not eventually contacted for an interview.

Some household members are not able to complete interviews due to health, travel or other reasons. These non-interviews are part of the overall response rate. Household members with hearing disabilities (17 persons) were sent hard copy forms of the questionnaire. Non-English speaking persons (2 persons) were interviewed in their own language.

Respondents refusing to complete an interview are expected in any survey. Refusals occur either at the very beginning before a household respondent is chosen, or during the interview. For the general household survey refusals were related to the gender of the person on the telephone. Nearly twice as many women as men refused before the respondent was selected.

Of the original sample, 1,481 households were contacted, with 1,227 completing the interview. The final response rate for the general household survey was 82.8 percent. The following table shows how the overall sample was resolved.

Calculation of Response Rate for Household Survey

Total prefix sets drawn	1,546
Sets all NW, not eligible	20
Unable to make any contact	45
Total households contacted	1,481
Completed	1,227
Refusals	208
Respondent selected	93
Male respondent	52
Female respondent	41
Respondent not determined	125
Male informant	40
Female informant	76
Informant gender unknown	9
Non-interviews	37
Male respondent	12
Female respondent	25
Unresolved appointments	4
Unresolved hearing impaired	5
<i>Response rate for households contacted</i>	82.8%

Data Cleaning

Data collection occurred during January and February of 1998. Data were captured on computer files using a Computer Assisted Telephone Interviewing (CATI) instrument. These data file were periodically edited and appended to the master data file. All contacts are recorded on the computer.

Broken or incomplete interviews were evaluated for completeness. Some broken interviews were contacted at another time and the interview completed. Those respondents breaking the interview after the completing the gambling prevalence screens were considered completed interviews. Others were included in the refusal count.

Several procedures were implemented to "clean" the data [Hair, et. al., 1998]. The data set was inspected to assure that no duplicate cases were included. Data mis-punches were corrected. In many cases mis-punches were identified because the interview went into a branch that was inappropriate for the respondent's answers. Corrections were noted by the interviewer.

A second type of data editing involved eliminating data elements that were obvious outliers or inconsistent among different parts of the interview. These were identified graphically or by comparing like elements of the questionnaire. Outliers were recorded as missing data.

The third level of data cleaning amounted to recoding variables for consistency. Legitimate skips were recoded to 7, 97, 997, etc. don't know to 8, 98, 998, etc. and refusals to 9, 99, 999, etc.

Missing Data Analysis

Missing data are a fact of life with survey research. We used the procedures suggested by National Center for Education Statistics to analyze missing data. Missing data are caused by respondent refusal and collection problems. Data for 18 cases missing age values were imputed using regression models. An imputation flag variable is found in the data set.

Weighting and Imputation

After constructing the problem gambling screen separately and examining the lifetime and current prevalence based on the SOGS, weighting the data was necessary for analysis. Of particular concern were women aged 35-44; under-representing this age/gender group is likely to have a significant impact on our estimate of current SOGS prevalence.

Why did fewer middle-aged women than expected cooperate? The following two possibilities are hypothesized:

First, most people who refused to cooperate in the household survey did so very early in the interview, even before we randomly selected a respondent from within the household. However, we do know the sex of the persons who hung up. A large majority of informants were female.

Because these females hung up so early in the interview process, our guess is these are women who often answer their household's telephone and are often tele-marketing targets. They are simply fed up with telephone inquiries of any kind.

We encountered a second phenomenon, which may explain a small proportion of the non-cooperation. One might call it "Alpha Male Syndrome." In a small number of cases a male answered the telephone and insisted that he alone would provide household information, even trying to by-pass our respondent selection process.

Weights were calculated using 1997 age and sex population estimates by the U.S. Bureau of the Census. These weights were applied for all statistical analysis, to ensure correct representation of the sample. WT2 enables the analyst to calculate point estimates based on the 1997 adult Montana population. This is quite useful. However, the large N of these point estimates artificially increases estimates of their precision. Nearly all t-tests using WT2 will find significant differences at the .05 level.

WT3 adjusts the sample to correspond to 1997 age and sex proportions and sums to 1227 (WT3 mean = 1). This produces estimates of precision which are not artificially inflated.

Statistical analysis

The data were analyzed with Statistical Package for the Social Sciences, Version 8.0 (SPSS). Labels were created and analytical recodes generated. Frequencies of questions from the

household survey may be found in Appendix I. Frequencies for the Flathead Reservation data are not published for confidentiality reasons. Specifically, there is a significant risk of statistical disclosure of the identity of respondents.

References

Kish, Leslie [1949] 'A procedure for objective respondent selection within the household', **Journal of the American Statistical Association**, 44 , 380-387.

Kish, Leslie [1965] **Survey Sampling**, John Wiley & Sons, Inc, New York.

Hair, Joseph, Rolph E. Anderson, Ronald L. Tatham, Willaim C. Black [1998] **Multivariate Data Analysis, Fifth Edition**, Prentice Hall.

COMPARING THE SOGS AND THE DSM-IV IN MONTANA

A variety of methodological questions have been raised in recent years about research on gambling and problem gambling in the general population (Dickerson 1993; Lesieur 1994; Walker 1992). One serious concern has to do with changes in the criteria for identifying pathological gamblers that have been adopted by the American Psychiatric Association. The South Oaks Gambling Screen was based on the original DSM-III criteria published in 1980 and was tested in clinical trials against the DSM-III-R criteria published in 1987. In the DSM-III, a diagnosis of pathological gambling required an individual to meet four of seven criteria with an exclusion of Anti-Social Personality Disorder. In the DSM-III-R, the same diagnosis required an individual to meet four of nine criteria and the exclusion of Anti-Social Personality Disorder was dropped. In the DSM-IV, a diagnosis of pathological gambling requires an individual to meet five of ten criteria with an exclusion of Manic Personality Disorder.

Since so many surveys have been carried out using the South Oaks Gambling Screen,¹ use of this instrument allows comparisons of gambling problems across jurisdictions as well as over time (Shaffer, Hall & Vander Bilt 1997; Walker & Dickerson 1996). With the recent changes in the psychiatric criteria for pathological gambling, however, researchers have begun to question whether the South Oaks Gambling Screen is the best tool for measuring the prevalence of pathological gambling in the community. Recent work in Minnesota as well as earlier research in New Zealand suggests that while the South Oaks Gambling Screen is well-suited for identifying individuals at risk for developing a gambling pathology, screens based on the DSM-IV may be more useful if the goal of a study is to estimate the prevalence of pathological gambling in the general population (Abbott & Volberg 1992, 1996; Stinchfield 1997).

In moving forward, it is essential that the performance of any new instrument, such as the DSM-IV, be compared to the South Oaks Gambling Screen as well as to clinical assessments so that findings based on these new measurements can be matched to findings based on the South Oaks Gambling Screen. In this way, the field of gambling research can move forward in an evolutionary, rather than revolutionary, manner (Volberg 1998).

The Montana Survey

In the Montana survey, the DSM-IV Screen was used in addition to the South Oaks Gambling Screen. The South Oaks Gambling Screen was used in order to obtain prevalence data comparable to data from many other North American jurisdictions including the baseline survey in Montana. The DSM-IV Screen was used in order to assess pathological gambling using the most current criteria and to contribute to the development of problem gambling research. While this and similar studies do not answer questions about the validity and reliability of the DSM-IV Screen in relation to clinical assessments, use of the DSM-IV Screen does provide an important opportunity to understand how the two most widely-used methods to identify problem and pathological gamblers operate in relation to one another.

In administering the questionnaire for the Montana survey, the two problem gambling screens were rotated so that half of the sample answered the items from the South Oaks Gambling Screen first and the other half of the sample answered the items from the DSM-IV Screen first. Since the two

¹ Baseline studies based on the South Oaks Gambling Screen have been carried out in 29 United States and Canadian jurisdictions, including Montana, as well as in Australia, New Zealand, Spain and Sweden. Replication surveys based on the South Oaks Gambling Screen have now been carried out in ten jurisdictions including Montana.

problem gambling screens were administered only to respondents who had ever gambled, all of the information reported in this section is based on the sample of gamblers (N=1,100) rather than on the total Montana sample.

The DSM-IV Screen

The South Oaks Gambling Screen is a 20-item scale based on the diagnostic criteria for pathological gambling (American Psychiatric Association 1980). Weighted items on the South Oaks Gambling Screen include hiding evidence of gambling, spending more time or money gambling than intended, arguing with family members over gambling and borrowing money to gamble or to pay gambling debts. In developing the South Oaks Gambling Screen, specific items as well as the entire screen were tested for reliability and validity with a variety of groups, including hospital workers, university students, prison inmates and inpatients in alcohol and substance abuse treatment programs (Lesieur & Blume 1987; Lesieur, Blume & Zoppa 1986; Lesieur & Klein 1985).

The DSM-IV Screen is a 10-item scale based on the most recent diagnostic criteria for pathological gambling (American Psychiatric Association 1994). In developing the DSM-IV criteria, 222 self-identified pathological gamblers and 104 substance abusers who gambled socially tested the individual items (Lesieur & Rosenthal 1991). Discriminant analysis was used to identify the items that best differentiated between pathological and non-pathological gamblers. While the results from this sample indicated that a cutoff of 4 points was appropriate, the American Psychiatric Association (1994) subsequently established a diagnostic cutoff of 5 points. The individual DSM-IV criteria include the following behaviors:

PREOCCUPATION	Preoccupied with gambling (e.g. preoccupied with reliving past gambling experiences, handicapping or planning the next venture, or thinking of ways to get money with which to gamble)
TOLERANCE	Need to gamble with increasing amounts of money in order to achieve the desired excitement
WITHDRAWAL	Restlessness or irritability when attempting to cut down or stop gambling
ESCAPE	Gambling as a way of escaping from problems or relieving dysphoric mood (e.g. feelings of helplessness, guilt, anxiety or depression)
CHASING	After losing money gambling, often return another day in order to get even ("chasing one's losses")
LYING	Lies to family members, therapists or others to conceal the extent of involvement with gambling
LOSS OF CONTROL	Made repeated unsuccessful efforts to control, cut back or stop gambling
ILLEGAL ACTS	Committed illegal acts, such as forgery, fraud, theft or embezzlement, in order to finance gambling
RISKED SIGNIFICANT RELATIONSHIP	Jeopardized or lost a significant relationship, job, educational or career opportunity because of gambling
BAILOUT	Reliance on others to provide money to relieve a desperate financial situation caused by gambling

The DSM-IV criteria were adapted slightly for use in a survey of British casino patrons (Fisher 1996) and it is this DSM-IV Screen that was used in the surveys in Colorado, Montana, New York and Oregon (Volberg 1996, 1997a, 1997b). In developing the DSM-IV Screen, Fisher made some minor adjustments to the wording of the DSM-IV criteria and increased the number of response categories from "Yes/No" to "Never," "Once or Twice," "Sometimes" and "Often." In the surveys in Colorado, Montana, New York and Oregon, respondents received a score of one for

any of the DSM-IV Screen items to which they gave a positive response ("Once or Twice," "Sometimes" or "Often").² Total scores were obtained by adding the positive items for each respondent.

In her analysis of problem gambling among British casino patrons, Fisher (1996) identified respondents who scored 3 or 4 points on the DSM-IV Screen as "problem gamblers" and respondents who scored 5 or more points as "severe problem gamblers." In our analysis of the DSM-IV Screen, we have followed Fisher's lead and used the terms "problem gambler" to identify respondents who score 3 or 4 points on the DSM-IV Screen and "severe problem gambler" to identify respondents who score 5 or more on the DSM-IV Screen.

Statistical Characteristics of the DSM-IV Screen

In this section, we examine the psychometric properties of the DSM-IV Screen among the Montana respondents who have ever gambled. These psychometric properties are important in assessing the accuracy of the two different methods used to identify problem and pathological gamblers in the general population. There are different kinds of error inherent in any set of data. While random error is addressed by using statistical techniques to reject the "null hypothesis" and to calculate the probability that a particular result is not due to random error, measurement error is more difficult to assess.

The accuracy of any instrument is measured by looking at the reliability and validity of the instrument (Litwin 1995). The **reliability** of an instrument refers to the ability to reproduce the results of the application of the test. The **validity** of an instrument refers to the ability of the instrument to measure what it is intended to measure. In examining the psychometric properties of the DSM-IV Screen, we assess its reliability by examining the internal consistency of the screen and then analyze the individual items to determine the ability of the screen to discriminate effectively between non-problem and problem gamblers. We then examine several forms of validity for the DSM-IV Screen.

Reliability

The most widely accepted test of the reliability of a screen is a measure of the internal consistency of the instrument. Generally, screens with large numbers of items will demonstrate higher internal consistency than screens with only a few items. In Montana, despite the fact that the DSM-IV Screen has only half the number of items as the South Oaks Gambling Screen, the reliability of the DSM-IV Screen among the gamblers is excellent with Cronbach's alpha at .91, substantially higher than the .70 that is generally accepted as representing good reliability.

In addition to testing the internal consistency of the DSM-IV Screen, we carried out a factor analysis of the screen to assess how the individual items cluster together. Factor analysis shows that, among the Montana gamblers, 60% of the variance for the DSM-IV Screen was accounted for by one factor. Only one other factor achieved an eigenvalue over 1.0 and this factor accounted for an additional 10% of the variance. These findings suggest that the scale is homogeneous and measures the desired behavior.

² The scoring method used with the Montana sample is somewhat different from the scoring method used by Fisher (1996). In Fisher's approach, the first seven items were scored only if the response was "Often" while the last three items were scored for any positive response. The different scoring method used in Montana and other United States jurisdictions was adopted because of the low response rate to the DSM-IV Screen items in these surveys compared to the sample of casino patrons used by Fisher.

Item Analysis

Endorsement of DSM-IV Screen items among Montana gamblers ranged from a high of 10.6% (Preoccupation) to a low of 0.3% (Beyond the Legal). It is instructive to compare positive responses to specific items by problem gamblers and non-problem gamblers to see how well the different items discriminate between these groups. For this analysis, we have used the SOGS classification of non-problem and problem gamblers in order to prevent confusion between the method of classifying respondents and the items by which they were classified. Since all of the DSM-IV Screen items are framed in the past year, the *current* problem and probable pathological gamblers in Montana were used in this analysis.

Table 1: Comparing Non-Problem and Problem Gamblers on the DSM-IV Items

DSM-IV Items	Non-Problem Gamblers % (N = 1,056)	Problem Gamblers % (N = 44)	Sig.
Preoccupation	9.1	48.8	.000
Tolerance	1.4	38.6	.000
Withdrawal	0.9	27.3	.000
Escape	2.6	38.6	.000
Chasing Losses	4.6	70.5	.000
Lying	0.3	18.2	.000
Tried to Stop	1.0	43.2	.000
Illegal Acts	0.1	4.5	.000
Risked Significant Relationship	0.1	9.1	.000
Bailout	0.3	13.6	.000
Mean DSM-IV Score	0.20	3.12	.000

Table 1 shows that all of the DSM-IV items discriminate effectively between SOGS-defined problem and non-problem gamblers in Montana. The most effective discriminator among the DSM-IV items was Chasing with 70.5% of the current problem and probable pathological gamblers scoring a positive response in contrast to only 4.6% of the non-problem gamblers. The next best discriminator was Preoccupation, with 48.8% of the problem gamblers scoring a positive response compared to 9.1% of the non-problem gamblers. **Table 1** also shows that there is a significant difference in the mean DSM-IV scores for non-problem and problem gamblers, supporting the notion that the DSM-IV Screen measures something similar to the SOGS. Statistical significance was tested using chi-square analysis for the individual items and analysis of variance of the means for the total scores.

Validity

There are several different types of validity that can be measured to assess the performance of an instrument. These include content, criterion, congruent and construct validity. Content validity is a subjective measure of how appropriate the items seem to a set of reviewers who have some knowledge of the subject matter. The DSM-IV Screen has already been found to have good content validity by a variety of appropriate audiences including self-identified pathological gamblers as well as treatment professionals and survey researchers (Fisher 1996; Lesieur & Rosenthal 1991).

Criterion Validity

Criterion validity requires that the instrument be judged against some other method that is acknowledged as a "gold standard" for assessing the same variable. In the case of the DSM-IV Screen, we must use the SOGS as the "gold standard" since this is the primary method that has been used to identify problem and pathological gamblers since the late 1980s (Volberg 1998; Volberg & Banks 1990). As a first step, we calculated the correlation coefficient between the DSM-IV Screen and the current South Oaks Gambling Screen. The correlation coefficient between the total scores on the two screens was 0.75 which is significant at the 0.01 level.

To better understand how the SOGS and the DSM-IV Screen operate in relation to one another, it is useful to examine how respondents scored on each of these instruments in more detail. Overall, the prevalence of the less severe DSM-IV category (3 or 4 points) is 1.73% while the prevalence of the more severe DSM-IV category (5 or more points) is 1.09% among respondents in Montana who gambled. These figures compare to 2.18% and 1.82% for the current SOGS scores among respondents who gambled. **Table 2** shows the number of respondents who scored at different levels on the SOGS and the DSM-IV.

Table 2: Comparing Scores on the SOGS and the DSM-IV

SOGS	DSM-IV			Total
	0 - 2	3 - 4	5+	
0 - 2	1045	10	1	1056
3 - 4	18	4	2	24
5+	6	4	9	19
Total	1069	18	12	1099

Table 2 shows that the DSM-IV Screen operates quite well in relation to the SOGS. On the one hand, respondents who score low on the DSM-IV Screen also tend to score low on the SOGS. At the other end of the problem spectrum, 92% of respondents who score high on the DSM-IV Screen (5 or more) score 3 or more points on the SOGS. In addition, 44% of the respondents who score 3 or 4 points on the DSM-IV Screen also score 3 or 4 points on the SOGS. These findings are similar to findings on the performance of the DSM-IV Screen in Oregon but in contrast to the results of surveys in Colorado and New York, where the DSM-IV Screen did not perform as well in relation to the SOGS.

While the DSM-IV Screen appears to operate well in relation to the SOGS, the performance of the SOGS in relation to the DSM-IV Screen is not as satisfactory. The majority of respondents who score as current probable pathological gamblers on the SOGS (68%) score 3 or more points on the DSM-IV Screen while 47% of these respondents score at the highest level on the DSM-IV Screen. This is similar to the operation of the SOGS vis-à-vis the DSM-IV Screen in other states where the two screens have both been used.

Congruent Validity

Since several of the items on the SOGS and DSM-IV Screen are similar, it is possible to check whether respondents answered similar questions differently in different places in the interview. **Table 3** shows how respondents who gambled answered several similar questions from the current SOGS and the DSM-IV Screen.

Table 3: Comparing Scores on Similar SOGS and DSM-IV Items

	SOGS or DSM-IV Item	% Positive
CHASING	Go back another day to win money you lost (chasing) (SOGS)	8.4
	Often return another day to get even (chasing) (DSM)	7.2
LYING	Claimed to win when in fact lost (SOGS)	2.0
	Hidden evidence of gambling (SOGS)	1.1
	Lies to others to conceal extent of gambling (DSM)	1.0
TOLERANCE	Spend more time or money gambling than intended (SOGS)	10.6
	Need to gamble with increasing amounts to achieve desired excitement (DSM)	2.9
LOSS OF CONTROL	Would like to stop gambling but couldn't (SOGS)	1.5
	Made repeated unsuccessful efforts to control or stop gambling (DSM)	2.7

Table 3 shows that respondents in Montana are less likely to give a positive answer to the DSM-IV questions than to the current SOGS items assessing Chasing, Lying and Tolerance. Respondents are more likely to give a positive answer to the DSM-IV question than to the current SOGS item assessing Loss of Control. Differences have been noted in the responses to items assessing similar behaviors in other surveys where both screens have been used. However, these differences do not follow a single pattern. While it is likely that these differences are due to the wording of specific items, further research is needed to investigate this question with precision.

Construct Validity

In assessing the performance of a new instrument, it is helpful to examine differences between classified groups with respect to behaviors that are associated with problem gambling but are not included in the measurement scale. In gambling surveys, we can examine differences between DSM-IV-defined non-problem and pathological gamblers in their mean DSM-IV Screen scores as well as other measures related to gambling difficulties, including weekly gambling, time spent gambling per session, largest amount lost in a single day, total expenditures on gambling, parental gambling problems and age when gambling started.

There are significant differences in the mean scores of problem and non-problem gamblers, as defined by the DSM-IV Screen. The mean score of non-problem gamblers on the DSM-IV Screen is 0.2 compared with 3.2 for problem gamblers and 7.3 for severe problem gamblers.

There are numerous other behaviors that provide support for the construct validity of the DSM-IV Screen. For example, problem and severe problem gamblers, as defined by the DSM-IV Screen, are significantly more likely than non-problem gamblers to gamble weekly or more often, to gamble for 3 or more hours at a time, to have lost \$1,000 or more in a single day, to have felt nervous about their gambling, to believe that a parent had a gambling problem and to have desired help for a gambling problem. Problem and severe problem gamblers, as defined by the DSM-IV Screen, acknowledge starting to gamble at a significantly younger age than non-problem gamblers. Problem gamblers also estimate that they had spent significantly more on gambling in the past month than non-problem gamblers. Finally, problem and severe problem gamblers as defined by the DSM-IV Screen are significantly more likely than non-problem gamblers to identify Montana gambling machines as their preferred type of gambling.

Comparing the SOGS and DSM-IV Problem Gamblers

The prevalence of problem and severe problem gambling, measured by the DSM-IV Screen, is nearly identical to the prevalence rates identified with the South Oaks Gambling Screen. While 1.55% of the total sample (N=1,227) scored 3 or 4 points on the DSM-IV Screen, 1.95% of the total sample scored 3 or 4 points on the current South Oaks Gambling Screen. While 0.98% of the total sample scored 5 or more points on the DSM-IV Screen, 1.55% of the total sample scored 5 or more points on the current South Oaks Gambling Screen.

Table 4 compares the demographic characteristics of problem and severe problem gamblers as defined by the DSM-IV Screen with problem and pathological gamblers as defined by the SOGS. Since both the SOGS and the DSM-IV groups are small, and since the majority of the DSM-IV group is part of the SOGS problem group as well, no effort was made to test the differences for statistical significance. **Table 4** does show that problem gamblers, as defined by the DSM-IV, are more likely than problem gamblers as defined by the SOGS, to be female, between the ages of 30 and 39, divorced or separated, and to have graduated from college.

Table 4: Comparing Demographics of SOGS and DSM-IV Problem Gamblers

		SOGS Problem Gamblers %	DSM-IV Problem Gamblers %
		(N=44)	(N=31)
Gender			
	Male	46.5	38.7
	Female	53.5	61.3
Age			
	18 – 29	31.8	9.7
	30 – 39	22.7	38.7
	40 – 49	22.7	22.6
	50 – 64	18.2	22.6
	65+	4.5	6.5
Ethnicity			
	White	81.4	83.9
	American Indian	16.3	16.1
	Other	2.3	—
Marital Status			
	Married	36.4	25.0
	Widowed	—	6.3
	Divorced/Separated	34.1	46.9
	Never Married	29.5	21.9
Education			
	Less than HS	18.2	16.1
	HS + some post	77.3	67.7
	BA +	4.5	16.1
Employment			
	Employed	56.8	54.8
	Unemployed	36.4	38.7
	Other	6.8	6.5
Income			
	Less than \$15,000	34.9	32.3
	\$15,000 to \$35,000	37.2	41.9
	\$35,000 to \$50,000	11.6	9.7
	\$50,000 or More	16.3	16.1

Summary

Comparison of the South Oaks Gambling Screen and the DSM-IV Screen in the Montana survey shows that the two screens are highly consistent and appear to be measuring the same phenomenon. The DSM-IV Screen is slightly more strict than the South Oaks Gambling Screen in classifying individuals as problem or pathological gamblers.

Use of the DSM-IV Screen in the Montana survey provided a valuable opportunity to improve our understanding of the DSM-IV Screen in relation to the South Oaks Gambling Screen. In addition, use of this screen provides a basis for comparison in future surveys of gambling and problem gambling in Montana if the DSM-IV Screen, or any other instrument based on the DSM-IV criteria, becomes the instrument of choice for identifying problem and pathological gamblers in the general population.

In Montana, the SOGS and the DSM-IV were administered to respondents from Gamblers Anonymous. In the future, it would be helpful to compare the operation of the SOGS and the DSM-IV Screen in this population. Such an analysis would be a valuable contribution to our understanding of how these screens operate in more clinically-based populations.

References

- Abbott, M. W. & R. A. Volberg. 1992. Frequent Gamblers and Problem Gamblers in New Zealand: Report on Phase Two of the National Survey. Research Series No. 14. Wellington: New Zealand Department of Internal Affairs.
- Abbott, M. W. & R. A. Volberg. 1996. "The New Zealand National Survey of Problem and Pathological Gambling." Journal of Gambling Studies, 12 (2): 143-160.
- American Psychiatric Association. 1980. Diagnostic and Statistical Manual of Mental Disorders, Third Edition. Washington, DC: American Psychiatric Association.
- American Psychiatric Association. 1994. Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition. Washington, DC: American Psychiatric Association.
- Dickerson, M. G. 1993. "A Preliminary Exploration of a Two-Stage Methodology in the Assessment of the Extent and Degree of Gambling-Related Problems in the Australian Population." In Gambling Behavior and Problem Gambling. W. R. Eadington & J. A. Cornelius (eds). Reno: University of Nevada Press.
- Fisher, S. E. 1996. Gambling and Problem Gambling Among Casino Patrons. Report to the British Casino Industry Consortium.
- Lesieur, H. R. 1994. "Epidemiological Surveys of Pathological Gambling: Critique and Suggestions for Modification," Journal of Gambling Studies 10 (4): 385-398.
- Lesieur, H. R. & S. B. Blume. 1987. "The South Oaks Gambling Screen (SOGS): A New Instrument for the Identification of Pathological Gamblers," American Journal of Psychiatry 144: 1184-1188.
- Lesieur, H. R. & R. Klein. 1985. Prisoners, Gambling and Crime. Paper presented at the Meetings of the Academy of Criminal Justice Scientists.
- Lesieur, H. R. & R. J. Rosenthal. 1991. "Pathological Gambling: A Review of the Literature (prepared for the American Psychiatric Association Task Force on DSM-IV Committee on Disorders of Impulse Control Not Elsewhere Classified)," Journal of Gambling Studies 7 (1): 5-40.
- Lesieur, H. R., S. Blume & R. M. Zoppa. 1986. "Alcoholism, Drug Abuse, and Gambling," Alcoholism: Clinical and Experimental Research 10: 33-38.
- Litwin, M. S. 1995. How to Measure Survey Reliability and Validity. Thousand Oaks: Sage Publications.
- Shaffer, H. J., M. N. Hall & J. Vander Bilt. 1997. Estimating the Prevalence of Disordered Gambling Behavior in the United States and Canada: A Meta-analysis. Boston, MA: Harvard Medical School Division on Addictions.
- Stinchfield, R. 1997. Reliability, Validity and Classification Accuracy of the South Oaks Gambling Screen (SOGS). Paper presented at the 10th International Conference on Gambling and Risk Taking. Montreal, CANADA.
- Volberg, R. A. 1996. Gambling and Problem Gambling in New York: A 10-Year Replication Survey, 1986 to 1996. Report to the New York Council on Problem Gambling.

Volberg, R. A. 1997a. Gambling and Problem Gambling in Colorado. Report to the Colorado Department of Revenue.

Volberg, R. A. 1997b. Gambling and Problem Gambling in Oregon. Report to the Oregon Gambling Addiction Treatment Foundation.

Volberg, R. A. 1998. Methodological Issues in Research on Problem Gambling. Report to the National Research Council, National Academy of Sciences.

Volberg, R. A. & S. M. Banks. 1990. "A Review of Two Measures of Pathological Gambling in the United States," Journal of Gambling Behavior 6 (2): 153-163.

Walker, M. B. 1992. The Psychology of Gambling. Oxford: Pergamon Press.

Walker, M. B. & M. G. Dickerson. 1996. "The Prevalence of Problem and Pathological Gambling: A Critical Analysis," Journal of Gambling Studies 12 (2): 233-249.

Analysis of Respondent Reported Gambling Expenditures

Respondent reports of gambling expenditures in the Montana household survey differ from estimates derived from state administrative records. In general, respondents overstate their lottery expenditures and understate their video gambling machine expenditures. This pattern has been found in analyses of respondent reported gambling expenditures in other states (Volberg et al 1998).

At this time there is no scientific evidence to support the notion that problem gamblers' reporting errors are different from non-problem gamblers' reporting errors. If non-problem gamblers' reporting errors are similar to those of problem gamblers, then survey estimates of the proportion spent by problem gamblers on a particular game are unaffected by error in total expenditure estimates. This is because the proportion for each type of gambling is based on a comparison of reported expenditures by non-problem and problem gamblers for *that type of gambling*. However, further research is needed to examine gambling expenditure reporting error (Blaszczynski, Dumlao & Lange 1997).

The following paragraphs examine the relationship between reported and actual expenditures in Montana more closely. Possible explanations for the difference between reported and actual expenditures are also discussed.

As shown in the following table, Montanans report lottery expenditures that are about double what would be expected based on state administrative records. In Montana, respondents overstated their lottery expenditures by a factor of 2.01. In Iowa respondents overstated their lottery expenditures by a similar factor (1.77) and Mississippi respondents reported lottery expenditures six times the actual rate. In contrast to Montana and Iowa, there is no state lottery in Mississippi. The reported expenditures on lottery in Mississippi are based on a small number of respondents who purchased lottery tickets in contiguous states or via resellers.

Type of Gambling	Reported (\$/person/year)	Actual (\$/person/year)	Ratio
Iowa			
Lottery	79.09	44.59	1.77
Casino Slots	112.02	142.8	0.78
Mississippi			
Lottery	26.67	4.38	6.09
Casino Slots	141.83	161.19	0.88
Montana			
Lottery	88.68	44.05	2.01
VGMs	312.24	851.32	0.37

Montanans reported about 37 percent of their actual expenditures on video gambling machines. The Iowa and Mississippi studies included only casino slot machines. Iowans reported 78 percent of their actual slot machine expenditures, while Mississippians reported 88 percent.

The question of the match between information reported in surveys and information from alternative sources about these activities is common to a variety of research areas, including market research, alcohol research and research on sexual behavior. In general, while market

researchers have found *telescoping* to be a factor in non-stigmatized activities, researchers investigating socially undesirable behaviors, such as heavy alcohol use or extreme sexual behavior, have found that these activities tend to be under-reported relative to alternative sources of information.

Telescoping results when a respondent remembers a behavior (like spending on the lottery or purchasing detergent) but forgets the date or frequency of the behavior. Comparisons with actual amount of product sold usually find the amount reported by respondents is more than 50 percent higher than the amount sold (Sudman & Bradburn 1991). In contrast, it is estimated that only 40 to 60 percent of all alcohol sales are accounted for in surveys of alcohol consumption in the general population (Pernanen 1974; Polich & Orvis 1979). Similarly, there are large discrepancies in the number of sexual partners that men and women report in surveys of sexual activity.

Why do respondent reports on gambling expenditures differ from actual expenditures in Montana? There are several possible explanations.

1. Respondents may interpret the words "typical" and "spend" differently. (Respondents in the Montana gambling survey were asked how much they spend in a typical month.)
2. For video gambling machines, respondent memory may be affected by the rapid cycle of play.
3. For video gambling machines, respondent memory may be affected by alcohol consumption.
4. Video gambling may be viewed by some respondents as a socially undesirable behavior, leading to under-reporting of expenditures.
5. Lottery may not be viewed as socially undesirable. If this is true, then respondent reports of purchasing a lottery product may be subject to the common phenomenon of telescoping.

References

- Blaszczynski, A., V. Dumlao & M. Lange. 1997. "How Much Do You Spend Gambling? Ambiguities in Survey Questionnaire Items," Journal of Gambling Studies 13 (3): 237-252.
- Pernanen, K. 1974. "Validity of Survey Data on Alcohol Use." In Research Advances in Alcohol and Drug Problems, Volume One edited by R. J. Gibbins, Y. Israel, H. Kalant, R. E. Popham, W. Schmidt & R. G. Smart. Pp. 355-374. New York: Wiley & Sons.
- Polich, J. M. & B. R. Orvis. 1979. Alcohol Problems: Patterns and Prevalence in the U.S. Air Force. Report to the United States Air Force. Rand R-2308-AF.
- Sudman, S. & N. M. Bradburn. A Practical Guide to Questionnaire Design. San Francisco: Jossey-Bass. 1991.
- Volberg, R. A., W. L. Moore, E. M. Christiansen, W. E. Cummings & S. M. Banks. "Unaffordable Losses: Estimating the Proportion of Gambling Revenues Derived from Problem Gamblers." Gambling Law Review, vol. 4, number 8, 1998.

PROPORTION OF EXPENDITURES BY PROBLEM GAMBLERS

In finalizing the report to the Montana Gambling Study Commission, the two research teams independently checked all of the numbers included in the sections of the draft report dealing with the household survey. In conducting these checks, some errors were identified and corrected. The majority of these errors were caused by differences in the way the two research teams dealt with missing values for specific variables and the greatest impact on the reported results was in the expenditures on different types of gambling.

Figure 6 on Page 25 of the draft report (September 1, 1998) provided information about the proportion of expenditures for different types of gambling that came from problem and probable pathological gamblers. That figure should be corrected as follows:

Type	VGMs	Live Keno	Lottery	Scratch Tickets	Live Bingo
Draft Report	37%	29%	17%	18%	13%
Corrected #	36%	28%	11%	18%	25%

It will also be necessary to correct the text that accompanies this figure on Page 25. The paragraph should be corrected to read:

"Problem and probable pathological gamblers account for a disproportionate share of gambling activity and taxes, based on their survey responses. As shown in Figure 6, problem gamblers account for 36% of monthly VGM expenditures and thus about 36% of monthly VGM tax revenues. The corresponding figure for live keno is 28 percent, lottery 11 percent; scratch tickets 18 percent; and live bingo 25 percent (excluding one respondent who may have incorrectly answered the question). These estimates are based on gamblers' reports of their typical months' spending. Little research has been conducted which examines the accuracy of gamblers' reported spending (Blaszczynski, Dumlao & Lange 1997; Volberg, Moore, Christiansen, Cummings & Banks 1998)."

References

- Blaszczynski, A., V. Dumlao & M. Lange. 1997. "'How Much Do You Spend Gambling?' Ambiguities in Survey Questionnaire Items," Journal of Gambling Studies 13 (3): 237-252.
- Volberg, R. A., W. L. Moore, E. M. Christiansen, W. E. Cummings & S. M. Banks. "Unaffordable Losses: Estimating the Proportion of Gambling Revenues Derived from Problem Gamblers." Gambling Law Review, vol. 4, number 8, 1998.

The following is a brief discussion of whether or not there has been an increase in the rate of pathological gamblers in Montana since 1992.

The difference between the 1992 and 1998 rates of probable pathological gamblers (past year SOGS 5+) is significant at the 85% confidence level. This means that if the 1998 study were repeated 100 times, the 1998 rate of past year probable pathological gamblers would be greater than the 1992 rate in 85 of the repetitions.

This increase is consistent with data collected by the Department of Public Health and Human Services Alcohol and Drug Information System (ADIS). ADIS collects information from each Montana patient discharged from chemical dependency treatment (this includes inpatient and outpatient treatment). One of the ADIS questions answered by the CD counselor is: "Is the client adversely affected by his or her gambling?" The criteria used by the counselor to make this assessment are the SOGS criteria.

ADIS Problem Gambling Statistics

YEAR	DISCHARGES	# ADVERSELY AFFECTED	PERCENT
FY96	8,358	134	1.6
FY97	8,028	196	2.4
FY98*	5,691	213	3.7

*First three quarters of FY98.

In addition, as the contractor report describes, the national and international trend is increasing rates of pathological gamblers in the various jurisdictions.

Finally, there was a very large increase in the number of Gamblers Anonymous chapters in Montana between 1992 and 1998. There were about 10 in 1992, and there are about 30 in 1998.

Taken together, there appears to be strong and diverse evidence which indicates the rate of pathological gambling in Montana increased between 1992 and 1998.

John Baldrige

Appendix C

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Gambling Establishment Survey Methodology

Gambling Establishment Survey Methodology

Questionnaire Design and Testing

The questionnaire for surveying Montana Gambling establishments was the first of its kind in the United States. Some items from IRS forms were used as well as items from the Census of Business. The questionnaire gathered information specifically for Montana. The questionnaire was developed with input from the Montana Gambling Study Commission.

The preliminary questionnaire was sent to a sample of 30 establishments for a field test. The field test was used to refine questions. The final questionnaire may be found in Appendix C.

Sampling

A list of firms with gambling licenses was obtained from the Montana Department of Justice, Gambling Control Division. The sample contained 1740 firms as of February 5, 1998. A random selection of 830 firms was selected for a sample. Thirty of these firms were sent a preliminary questionnaire as a field test. These questionnaires were reviewed and changes made to improve responses from the rest of the sample.

A pre-survey letter was sent to each of the 800 firms sampled. Each letter contained a letter from the commission and industry representatives. 134 of these letters were returned address unknown. These returned letters identified problems with the mailing list. Survey staff located each establishment by using phone directories and local post office information. The mailing list was updated with this information. Nine firms were never located and twenty-eight were out of business.

Calculation of Response Rate for Firm Survey

All firms sampled	800
Unable to locate	9
Out of business	28
Net firms sampled	763
Information collected	429
Completed mail questionnaire	358
Telephone interview	71
Refused	336
Refused with telephone contact	82
No response after repeated contacts	254

Response rate 56.2%

A pre-notification letter was sent to each establishment. Questionnaire packets were prepared and sent to each establishment one week later. Each packet contained a cover letter, a commission letter, an industry letter, a questionnaire, and a postage paid envelope. Packets were mailed first-class and respondents asked to return within two weeks. After two weeks, a letter was sent to each non-responding establishment encouraging response. After another two weeks, complete packets were sent again to non-responding firms. Two weeks later, each non-responding firm was contacted by phone about their questionnaire. This contact resulted in 82 direct refusals and 104 additional questionnaires sent. The final number of responses was 427 with an overall response rate of 56 percent.

Data Cleaning, Weighting, and Imputation

Data were manually entered into a database. Data entry for each record was visually verified by another person. Missing values for some items were replaced with the mean value of the item for establishments with a similar number of video gaming machines. Where number of machines was not recorded, the administrative record value was substituted.

Examination of the data suggested that weighting was necessary to overcome a lack of responses from establishments with 1 to 5 machines. Weighted data were used for all analysis.

Statistical analysis

The data were analyzed with Statistical Package for the Social Sciences, Version 8.0 (SPSS). Labels were created and analytical recodes generated. Frequencies of questions from the firm survey may be found in Appendix J.

Appendix D

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Gamblers Anonymous and Inpatient Census Methodology

THE HISTORY OF THE

REIGN OF KING CHARLES THE FIRST

IN WHICH ARE CONTAINED THE

CAUSES, THE CONDUCT, AND THE CONSEQUENCES

OF THE CIVIL WARS

IN GREAT BRITAIN

FROM THE YEAR 1625 TO 1649

BY JOHN HALLAM, ESQ.

OF LINCOLN'S INN

IN TWO VOLUMES

LONDON: PRINTED BY J. JOHNSON, ST. PAULS CHURCH-YARD, 1819.

Gamblers Anonymous and Inpatient Census Methodology

Questionnaire Design and Testing

The questionnaire used in the household survey was modified for self-administration by members of Gamblers Anonymous. Additional questions were added asking about specific experiences with the criminal justice system and co-morbidity problems. Questionnaire design incorporated input from the Commission. Questionnaire may be found in Appendix G.

A record abstraction form was developed to summarize data from patients of the two major inpatient treatment facilities in Montana (see Appendix H).

Sampling

Contractors visited GA meetings in the major Montana cities and distributed questionnaires to attending members. Follow-up was impossible because of the anonymity of the group members. Sixty-one questionnaires were returned for a response rate of 79.2 percent.

Response Rate Calculation for GA Survey

GA questionnaires distributed			77
Questionnaires returned			61
No response			16
Response rate			79.2%

An experienced records abstractor was sent to Rimrock Foundation in Billings and Rocky Mountain Treatment Center in Great Falls. Administrators at these facilities identified patients with a gambling problem served by the facilities over the last three years. Patient records were examined and relevant information recorded on the abstraction forms. Many items were not available because patients were not specifically asked for the information. A DSM-IV or SOGS score was available for most patients.

Rimrock Foundation	82
Rocky Mountain Treatment Center	14
Total patients with gambling problem	96

Data Cleaning

Data were manually entered into a database and each record visually examined for errors. Missing data were coded for legitimate skips and item non-response. Many data items for the Inpatient Census were unavailable.

Statistical analysis

The data were analyzed with Statistical Package for the Social Sciences, Version 8.0 (SPSS). Labels were created and analytical recodes generated. Frequencies of questions from the GA survey may be found in Appendix K. Frequencies for the inpatient data are not published for confidentiality reasons. Specifically, there is a significant risk of statistical disclosure of the identity of patients whose records were analyzed in the inpatient census.

Appendix E

.....
Household Questionnaire

CONFIDENTIAL

**MONTANA GAMBLING SURVEY
FEBRUARY 1998**

Prepared for: The Montana Gambling Commission
Established by the 55th Legislature of the State of Montana

Prepared by: The Bureau of Business and Economic Research
University of Montana - Missoula

USES OF THE DATA

The data from this survey will be used by state policy makers to assess the economic and social impacts of gambling in Montana. The information gathered by this survey may be used by the Montana Gambling Commission to make policy recommendations to the 56th Legislature and the Governor.

CONFIDENTIALITY

As a matter of policy, the Bureau of Business and Economic Research is required to protect the privacy of individuals who participate in voluntary surveys. We want you to know that:

1. You may skip any questions you do not wish to answer.
2. We are asking these questions in order to gather information on gambling in Montana and its economic and social impacts.
3. Your responses will be merged with those of others, and the answers you give will never be identified as yours.

GENERAL INSTRUCTIONS

This questionnaire was drafted for hearing-impaired Montanans. Please check the cover letter that was included with this questionnaire to ensure that the correct respondent completes it. After you complete this questionnaire, please return it using the enclosed, stamped envelope. If you have any questions, please contact:

Jim Sylvester
Bureau of Business and Economic Research
University of Montana - Missoula
Missoula, Montana 59812
(406) 243-5113
sylvestr@selway.umt.edu

PLEASE READ EACH QUESTION CAREFULLY.

It is important that you follow the directions for responding to each kind of question. These are:

A. (CIRCLE ONE)

What color are your eyes?

(CIRCLE ONE CATEGORY)

Brown	1
Blue	2
Green	3
Another color	4

If your eyes are green, you would circle the number 3 as shown.

B. (CIRCLE ONE ON EACH LINE)

Do you plan to do any of the following next week?

(CIRCLE ONE ON EACH LINE)

	Yes	No	Not Sure
a. Rent a videotape	1	2	3
b. Go to a baseball game	1	2	3
c. Have dinner at a friend's house	1	2	3

If you do not plan to rent a videotape, are not sure about going to a baseball game next week, and plan to have dinner at a friend's house, you would circle one item on each line as shown.

C. (QUESTION WITH A SKIP)

a. Do you ever eat chocolate?

(CIRCLE ONE CATEGORY)

Yes

1

Go to b

No

2

Skip to c

b. Do you always brush your teeth after eating chocolate?

(CIRCLE ONE CATEGORY)

Yes

1

No

2

c. Last week, did you do any of the following?

(CIRCLE ONE ON EACH LINE)

Yes No

Saw a play

1

2

Went to a movie

1

2

Attended a sporting event

1

2

D. (CIRCLE ALL THAT APPLY)

When I go to a baseball game I:

(CIRCLE ALL THAT APPLY)

a. Buy a hotdog

1

b. Buy nachos

2

c. Buy popcorn

3

If you buy a hotdog and popcorn when you go to a baseball game, you would circle items 1 and 3 as shown.

SECTION I: GAMBLING INVOLVEMENT

People bet on many different things such as raffles, football games and card games. We are going to ask you about some activities such as these that you may participate in.

FOR EACH TYPE OF GAMBLING, IF YOU DO NOT ENGAGE IN THAT ACTIVITY, ANSWER NO AND SKIP TO NEXT TYPE OF GAMBLING.

IF YOU ENGAGED IN THE ACTIVITY IN YOUR LIFETIME, GO TO PAST YEAR.

IF YOU ENGAGED IN THE ACTIVITY IN THE PAST YEAR, ANSWER MONTHLY INVOLVEMENT, MONTHLY EXPENDITURE AND WEEKLY INVOLVEMENT.

IF YOU DID NOT ENGAGE IN THE ACTIVITY IN THE PAST YEAR, ANSWER NO AND SKIP TO THE NEXT TYPE OF GAMBLING.

IF YOU DO NOT GAMBLE: We understand that not everyone gambles, but your opinions are still very important to us.

GAME1. Have you ever bet or spent money on instant lottery games such as scratch off tickets?

(CIRCLE ONE CATEGORY)

Yes	1	Go to GamelA
No	2	Skip to Game2
Don't Know	8	Skip to Game2

GAME1A. Have you bet or spent money on instant lottery games such as scratch off tickets in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to GamelB
No	2	Skip to Game2
Don't Know	8	Skip to Game2

GAME1B. IF YES, How many days a month do you usually bet or spend money on instant lottery games?

GAME1C. How much do you spend on instant lottery games in a typical month? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so. [000,000]

GAME1D. Do you bet or spend money on instant lottery games at least once per week?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game2
No	2	Go to Game2
Don't Know	8	Go to Game2

GAME2. Have you ever bet or spent money on other lottery games such as Wild Card, Powerball or Montana Cash?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game2A
No	2	Skip to Game3
Don't Know	8	Skip to Game3

GAME2A. Have you bet or spent money on other lottery games such as Wild Card, Powerball or Montana Cash in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game2A1
No	2	Skip to Game3
Don't Know	8	Skip to Game3

GAME2A1. Do you prefer?

(CIRCLE ONE CATEGORY)

Wild Card	1
Powerball	2
Montana Cash	3
Other	4
None	5
Don't Know	8

GAME2B. How many days a month do you usually bet or spend money on other lottery games?

GAME2C. How much do you spend on other lottery games in a typical month? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so. {000,000}

GAME2D. Do you bet or spend money on other lottery games at least once per week?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game3
No	2	Go to Game3
Don't Know	8	Go to Game3

GAME3. Have you ever bet or spent money on live bingo?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game3A
No	2	Skip to Game4
Don't Know	8	Skip to Game4

GAME3A. Have you bet or spent money on live bingo in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game3B
No	2	Skip to Game4
Don't Know	8	Skip to Game4

GAME3B. How many days a month do you usually bet or spend money on live bingo?

GAME3C. How much do you spend on live bingo in a typical month? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so. [000,000]

GAME3D. Do you bet or spend money on live bingo at least once per week?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game4
No	2	Go to Game4
Don't Know	8	Go to Game4

GAME4. Have you ever bet or spent money on live keno?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game4A
No	2	Skip to Game5
Don't Know	8	Skip to Game5

GAME4A. Have you bet or spent money on live keno in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game4B
No	2	Skip to Game5
Don't Know	8	Skip to Game5

GAME4B. How many days a month do you usually bet or spend money on live keno?

GAME4C. How much do you spend on live keno in a typical month? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so. [000,000]

GAME4D. Do you bet or spend money on live keno at least once per week?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game5
No	2	Go to Game5
Don't Know	8	Go to Game5

GAME5. Have you ever bet or spent money on charitable games including raffles, 50/50 tickets, casino or Las Vegas nights or other small-stakes games?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game5A
No	2	Skip to Game6
Don't Know	8	Skip to Game6

GAME5A. Have you bet or spent money on charitable games including raffles, 50/50 tickets, casino or Las Vegas nights or other small-stakes games in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game5B
No	2	Skip to Game6
Don't Know	8	Skip to Game6

GAME5B. How many days a month do you usually bet or spend money on charitable games?

GAME5C. How much do you spend on charitable games in a typical month? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so. [000,000]

GAME5D. Do you bet or spend money on charitable games at least once per week?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game6
No	2	Go to Game6
Don't Know	8	Go to Game6

GAME6. Have you ever bet or spent money on **gaming machines** including **poker machines, keno machines, bingo machines, redball or pinball machines** at a casino, gas station or convenience store in Montana?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game6A
No	2	Skip to Game7
Don't Know	8	Skip to Game7

GAME6A. Have you bet or spent money on **gaming machines** including **poker machines, keno machines, bingo machines, redball or pinball machines** at a casino, gas station or convenience store in Montana during the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game6A1
No	2	Skip to Game7
Don't Know	8	Skip to Game7

GAME6A1. Where do you usually play? Would it be at a:

(CIRCLE ONE CATEGORY)

Tavern or bar	1
Restaurant or lounge	2
Deli	3
Bowling alley	4
Convenience store or gas station	5
Other	6
Don't know	8

GAME6B. How many days a month do you usually bet or spend money on **gaming machines** at a casino, gas station or convenience store in Montana?

GAME6C. How much do you spend on **gaming machines** including **poker machines, keno machines, bingo machines, redball or pinball machines** at a casino, gas station or convenience store in Montana during a typical month? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so. [000,000]

GAME6D. Do you bet or spend money on **gaming machines** at a casino, gas station or convenience store in Montana at least once per week?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game7
No	2	Go to Game7
Don't Know	8	Go to Game7

GAME7. Have you ever bet or spent money on card games at a Montana casino, bar or tavern?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game7A
No	2	Skip to Game8
Don't Know	8	Skip to Game8

GAME7A. Have you bet or spent money on card games at a Montana casino, bar or tavern in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game7B
No	2	Skip to Game8
Don't Know	8	Skip to Game8

GAME7B. How many days a month do you usually bet or spend money on card games at a Montana casino, bar or tavern?

GAME7C. How much do you spend on card games at a Montana casino, bar or tavern in a typical month? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so. [000,000]

GAME7D. Do you play card games at a Montana casino, bar or tavern at least once per week?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game8
No	2	Go to Game8
Don't Know	8	Go to Game8

GAME8. Have you bet or spent money on gaming machines including poker machines, keno machines, bingo machines, slot machines, redball or pinball machines at an out-of-state casino?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game8A
No	2	Skip to Game9
Don't Know	8	Skip to Game9

GAME8A. Have you bet or spent money on gaming machines including poker machines, keno machines, bingo machines, slot machines, redball or pinball machines at an out-of-state casino in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game8B
No	2	Skip to Game9
Don't Know	8	Skip to Game9

GAME8B. How many days a month do you bet or spent money on gaming machines at an out-of-state casino?

GAME8C. How much do you spend on gaming machines at an out-of-state casino in a typical month? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so. [000,000]

GAME8D. Do you bet or spend money on gaming machines at an out-of-state casino at least once per week?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game9
No	2	Go to Game9
Don't Know	8	Go to Game9

GAME9. Have you bet or spent money on card games, dice games or roulette at an out-of-state casino?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game9A
No	2	Skip to Game10
Don't Know	8	Skip to Game10

GAME9A. Have you bet or spent money on card games, dice games or roulette at an out-of-state casino in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game9B
No	2	Skip to Game10
Don't Know	8	Skip to Game10

GAME9B. How many days a month do you bet or spent money on card games, dice games or roulette at an out-of-state casino?

GAME9C. How much do you spend on card games, dice games or roulette at an out-of-state casino in a typical month? We are looking for an approximate amount, rounded to the nearest 5 dollars or so. [000,000]

GAME9D. Do you bet or spend money on card games, dice games or roulette at an out-of-state casino at least once per week?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel0
No	2	Go to Gamel0
Don't Know	8	Go to Gamel0

GAME10. Have you bet or spent money on high stakes private card games?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel0A
No	2	Skip to Gamel1
Don't Know	8	Skip to Gamel1

GAME10A. Have you bet or spent money on high stakes private card games in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel0B
No	2	Skip to Gamel1
Don't Know	8	Skip to Gamel1

GAME10B. How many days a month do you bet or spend money on high stakes private card games?

GAME10C. How much do you spend on high stakes private card games in a typical month? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so. [000,000]

GAME10D. Do you bet or spend money on high stakes private card games at least once per week?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel1
No	2	Go to Gamel1
Don't Know	8	Go to Gamel1

GAME11. Have you bet or spent money on sports pools including office pools and sports tab games?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel1A
No	2	Skip to Gamel2
Don't Know	8	Skip to Gamel2

GAME11A. Have you bet or spent money on sports pools including office pools and sports tab games in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel1B
No	2	Skip to Gamel2
Don't Know	8	Skip to Gamel2

GAME11B. How many days a month do you bet or spent money on sports pools including office pools and sports tab games?

GAME11C. How much do you spend on sports pools including office pools and sports tab games in a typical month? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so.
[000,000]

GAME11D. Do you bet or spend money on sports pools including office pools and sports tab games at least once per week?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel2
No	2	Go to Gamel2
Don't Know	8	Go to Gamel2

GAME12. Have you bet or spent money on the outcome of sports events with friends, acquaintances or a bookmaker?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel2A
No	2	Skip to Gamel3
Don't Know	8	Skip to Gamel3

GAME12A. Have you bet or spent money on outcome of sports events with friends, acquaintances or a bookmaker in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel2B
No	2	Skip to Gamel3
Don't Know	8	Skip to Gamel3

GAME12B. How many days a month do you bet or spent money on outcome of sports events with friends, acquaintances or a bookmaker?

GAME12C. How much do you spend on outcome of sports events with friends, acquaintances or a bookmaker in a typical month? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so. [000,000]

GAME12D. Do you bet or spend money on outcome of sports events with friends, acquaintances or a bookmaker at least once per week?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel3
No	2	Go to Gamel3
Don't Know	8	Go to Gamel3

GAME13. Have you ever bet or spent money on horse or mule racing, on track, off-track or with a bookmaker?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel3A
No	2	Skip to Gamel4
Don't Know	8	Skip to Gamel4

GAME13A. Have you bet or spent money on horse or mule racing, on track, off-track or with a bookmaker in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel3B
No	2	Skip to Gamel4
Don't Know	8	Skip to Gamel4

GAME13B. How many days a month do you usually bet or spend money on horse or mule racing, on track, off-track or with a bookmaker?

GAME13C. How much do you spend on horse or mule racing, on track, off-track or with a bookmaker in a typical month? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so. [000,000]

GAME13D. Do you spend money on horse or mule racing, on track, off-track or with a bookmaker at least once per week?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel4
No	2	Go to Gamel4
Don't Know	8	Go to Gamel4

GAME14. Have you ever bowled, played pool, played golf or some other game of skill for money?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel4A
No	2	Skip to Gamel5
Don't Know	8	Skip to Gamel5

GAME14A. Have you bowled, played pool, played golf or some other game of skill for money in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel4B
No	2	Skip to Gamel5
Don't Know	8	Skip to Gamel5

GAME14B. How many days a month do you usually bowl, play pool, play golf or some other game of skill for money?

GAME14C. How much do you spend bowling, playing pool, playing golf or some other game of skill for money in a typical month? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so. [000,000]

GAME14D. Do you bowl, play pool, play golf or some other game of skill for money at least once per week?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel5
No	2	Go to Gamel5
Don't Know	8	Go to Gamel5

GAME15. Have you ever bet or spent money on telephone or computer wagering, including the Internet or the Worldwide Web?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel5A
No	2	Skip to Gamel6
Don't Know	8	Skip to Gamel6

GAME15A. Have you bet or spent money on telephone or computer wagering in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel5B
No	2	Skip to Gamel6
Don't Know	8	Skip to Gamel6

GAME15B. How many days a month do you usually bet or spend money on telephone or computer wagering?

GAME15C. How much do you spend on telephone or computer wagering in a typical month. We are only looking for an approximate amount, rounded to the nearest 5 dollars or so. [000,000]

GAME15D. Do you bet or spend money on telephone or computer wagering at least once per week?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel6
No	2	Go to Gamel6
Don't Know	8	Go to Gamel6

GAME16. Have you ever bet or spent money on any other type of gambling?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel6A
No	2	See instructions on next page
Don't Know	8	See instructions on next page

GAME16A. Have you bet or spent money on any other type of gambling in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel6B
No	2	See instructions on next page
Don't Know	8	See instructions on next page

GAME16B. How many days a month do you usually bet or spend money on other types of gambling?

GAME16C. How much do you spend on other types of gambling in a typical month? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so. {000,000}

GAME16D. Do you bet or spend money on other types of gambling at least once per week?

(CIRCLE ONE CATEGORY)

Yes	1	See instructions in next section
No	2	See instructions in next section
Don't Know	8	See instructions in next section

IF YOU DID NOT SAY "YES" TO ANY GAMBLING ACTIVITIES, SKIP TO SECTION IV (LIFE EVENTS) ON PAGE 23. OTHERWISE, CONTINUE WITH PLAY1 BELOW.

PLAY1. Thinking about the sorts of activities we just discussed, which involve an element of luck or chance, can you tell me which is your favorite gambling activity?

(CIRCLE ONE CATEGORY)

- a. Instant lottery games such as scratch off tickets
- b. Other lottery games such as Wild Card, Powerball, Montana Cash, Other
- c. Live bingo
- d. Live keno
- e. Charitable gaming including raffles, 50/50 tickets, casino or Las Vegas nights
- f. Gaming machines including poker machines, keno machines, bingo machines, redball or pinball machines at a casino, gas station or convenience store in Montana
- g. Card games at a Montana casino
- h. Gaming machines at an out-of-state casino
- i. Card games, dice games or roulette at an out-of-state casino
- j. High stakes private card games
- k. Sports pools including office pools and sports tab games
- l. Outcome of sports events with friends, acquaintances or a bookmaker
- m. Horse or mule racing, on track, off-track or with a bookmaker
- n. Bowled, played pool, played golf or some other game of skill for money
- o. Telephone or computer wagering
- p. Any other type of gambling

PLAY2. When participating in your favorite type of gambling, can you tell me the distance that you usually travel?

(CIRCLE ONE CATEGORY)

0 - 15 miles	1
15 - 30 miles	2
30 - 45 miles	3
45 - 60 miles	4
More than 60 miles	5
Don't Know	8

PLAY3. When participating in your favorite type of gambling, do you usually do so:

(CIRCLE ONE CATEGORY)

Alone	1
With your spouse or partner	2
With other family members	3
With friends	4
With co-workers	5
With some other individual or group	6
Don't Know	8

PLAY4. When participating in your favorite type of gambling, do you usually do so for:

(CIRCLE ONE CATEGORY)

Less than 1 hour	1
1 - 2 hours	2
3 - 5 hours	3
6 - 12 hours	4
More than 12 hours	5
Don't Know	8

PLAY5. For any of the types of gambling you have tried, what is the largest amount of money you have ever lost in one day gambling or wagering?

(CIRCLE ONE CATEGORY)

Less than \$1	1
\$1 - \$9	2
\$10 - \$99	3
\$100 - \$999	4
\$1,000 - \$9,999	5
\$10,000 or more	6
Don't Know	8

GO TO NEXT PAGE.

SECTION II: SOUTH OAKS GAMBLING SCREEN

The next set of questions is part of a standard measurement scale which has been used throughout the United States. There are no right or wrong answers to the questions that follow. We want to know what your experiences have been. Please try to be as accurate as possible in your answers and remember that this information is confidential.

FOR SOGS1A TO SOGS20B, IF YOU ANSWER "NEVER" OR "NO" TO A, SKIP TO NEXT QUESTION, OTHERWISE GO TO B.

SOGS1A. When you participate in the gambling activities we have discussed, how often do you go back another day to win back money you lost?
Is it:

(CIRCLE ONE CATEGORY)

Never	1	Skip to SOGS2A
Some of the time	2	Go to SOGS1B
Most of the time	3	Go to SOGS1B
Every time	4	Go to SOGS1B
Don't know	8	Skip to SOGS2A

SOGS1B. How often have you done this in the past year?

(CIRCLE ONE CATEGORY)

Never	1	Go to SOGS2A
Some of the time	2	Go to SOGS2A
Most of the time	3	Go to SOGS2A
Every time	4	Go to SOGS2A
Don't know	8	Go to SOGS2A

SOGS2A. Have you ever claimed to be winning money from these activities when in fact you lost?

(CIRCLE ONE CATEGORY)

Never	1	Skip to SOGS3A
Some of the time	2	Go to SOGS2B
Most of the time	3	Go to SOGS2B
Every time	4	Go to SOGS2B
Don't know	8	Skip to SOGS3A

SOGS2B. How often have you done this in the past year?

(CIRCLE ONE CATEGORY)

Never	1	Go to SOGS3A
Some of the time	2	Go to SOGS3A
Most of the time	3	Go to SOGS3A
Every time	4	Go to SOGS3A
Don't know	8	Go to SOGS3A

SOGS3A. Do you ever spend more time or money gambling than you intended?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS3B
No	2	Skip to SOGS4A
Don't know	8	Skip to SOGS4A

SOGS3B. Have you done this in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS4A. Have people ever criticized your gambling?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS4B
No	2	Skip to SOGS5A
Don't know	8	Skip to SOGS5A

SOGS4B. Have people criticized your gambling in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS5A. Have you ever felt guilty about the way you gamble or about what happens when you gamble?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS5B
No	2	Skip to SOGS6A
Don't know	8	Skip to SOGS6A

SOGS5B. Have you felt this way in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS6A. Have you ever felt that you would like to stop gambling, but didn't think that you could?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS6B
No	2	Skip to SOGS7A
Don't know	8	Skip to SOGS7A

SOGS6B. Have you felt this way in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS7A. Have you ever hidden betting slips, lottery tickets, gambling money or other signs of gambling from your spouse or partner, children, or other important people in your life?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS7B
No	2	Skip to SOGS8A
Don't know	8	Skip to SOGS8A

SOGS7B. Have you done so in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS8A. Have you ever argued with people you live with over how you handle money?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS8B
No	2	Skip to SOGS9A
Don't know	8	Skip to SOGS9A

SOGS8B. Have these arguments ever centered on your gambling?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS8C
No	2	Skip to SOGS9A
Don't know	3	Skip to SOGS9A

SOGS8C. Have you had any of these arguments in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS9A. Have you ever missed time from work or school due to gambling?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS9B
No	2	Skip to SOGS10A
Don't know	8	Skip to SOGS10A

SOGS9B. Have you missed time from work or school in the past year due to gambling?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS10A. Have you ever borrowed money from someone and not paid them back as a result of your gambling?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS10B
No	2	Skip to SOGS11A
Don't know	8	Skip to SOGS11A

SOGS10B. Have you done so in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS11A. Have you ever borrowed from household money to gamble or pay gambling debts?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS11B
No	2	Skip to SOGS12A
Don't know	8	Skip to SOGS12A

SOGS11B. Have you borrowed from household money in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS12A. Have you ever borrowed money from your spouse or partner to gamble or pay gambling debts?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS12B
No	2	Skip to SOGS13A
Don't know	8	Skip to SOGS13A

SOGS12B. Have you borrowed money from your spouse or partner in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS13A. Have you ever borrowed from other relatives or in-laws to gamble or pay gambling debts?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS13B
No	2	Skip to SOGS14A
Don't know	8	Skip to SOGS14A

SOGS13B. Have you borrowed from other relatives or in-laws in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS14A. Have you ever gotten loans from banks, loan companies or credit unions to gamble or pay gambling debts?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS14B
No	2	Skip to SOGS15A
Don't know	8	Skip to SOGS15A

SOGS14B. Have you gotten loans from banks, loan companies or credit unions in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS15A. Have you ever made cash withdrawals on credit cards to get money to gamble or pay gambling debts? (DOES NOT INCLUDE INSTANT CASH CARDS FROM BANK ACCOUNTS)

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS15B
No	2	Skip to SOGS16A
Don't know	8	Skip to SOGS16A

SOGS15B. Have you made cash withdrawals on credit cards in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS16A. Have you ever gotten loans from loan sharks to gamble or pay gambling debts?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS16B
No	2	Skip to SOGS17A
Don't know	8	Skip to SOGS17A

SOGS16B. Have you gotten loans from loan sharks in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS17A. Have you ever cashed in stocks, bonds or other securities to finance gambling?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS17B
No	2	Skip to SOGS18A
Don't know	8	Skip to SOGS18A

SOGS17B. Have you cashed in stocks, bonds or other securities in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS18A. Have you ever sold personal or family property to gamble or pay gambling debts?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS18B
No	2	Skip to SOGS19A
Don't know	8	Skip to SOGS19A

SOGS18B. Have you sold personal or family property to gamble or pay gambling debts in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS19A. Have you ever borrowed from your checking account by writing checks that bounced to get money for gambling or to pay gambling debts?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS19B
No	2	Skip to SOGS20A
Don't know	8	Skip to SOGS20A

SOGS19B. Have you borrowed from your checking account by writing checks that bounced in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS20A. Do you feel that you have ever had a problem with betting money or gambling?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS20B
No	2	Skip to next section
Don't know	8	Skip to next section

SOGS20B. Do you feel that you have had a problem with betting money or gambling in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to next section
No	2	Go to next section
Don't know	8	Go to next section

SECTION III: DSM-IV SCREEN

Next, we ask you some questions about how you feel about your gambling. As before, this set of questions is part of a standard measurement scale. There are no right or wrong answers to the questions that follow. We want to know what your experiences have been. Please try to be as accurate as possible in your answers and remember that all this information is confidential.

DSM1. In the past year, have you often found yourself thinking about gambling, for example reliving past gambling experiences, planning the next time you will play or thinking of ways to get money to gamble? Would you say it was ...

(CIRCLE ONE CATEGORY)

Never	1
Once or twice	2
Sometimes	3
Often	4
Don't know	8

DSM2. In the past year, have you needed to gamble with more and more money to get the amount of excitement you are looking for? Would you say it was ...

(CIRCLE ONE CATEGORY)

Never	1
Once or twice	2
Sometimes	3
Often	4
Don't know	8

DSM3. In the past year, have you become restless or irritable when trying to cut down or stop gambling? Would you say it was ...

(CIRCLE ONE CATEGORY)

Never	1
Once or twice	2
Sometimes	3
Often	4
Don't know	8

DSM4. In the past year, have you gambled to escape from problems or when you were feeling depressed, anxious or bad about yourself? Would you say it was ...

(CIRCLE ONE CATEGORY)

Never	1
Once or twice	2
Sometimes	3
Often	4
Don't know	8

DSM5. In the past year, after losing money gambling, have you returned another day in order to get even? Would you say it was ...

(CIRCLE ONE CATEGORY)

Never	1
Once or twice	2
Sometimes	3
Often	4
Don't know	8

DSM6. In the past year, have you lied to your family or others to hide the extent of your gambling? Would you say it was ...

(CIRCLE ONE CATEGORY)

Never	1
Once or twice	2
Sometimes	3
Often	4
Don't know	8

DSM7. In the past year, have you made repeated unsuccessful attempts to control, cut back or stop gambling? Would you say it was ...

(CIRCLE ONE CATEGORY)

Never	1
Once or twice	2
Sometimes	3
Often	4
Don't know	8

DSM8. In the past year, have you been forced to go beyond what is strictly legal in order to finance gambling or to pay gambling debts? Would you say it was ...

(CIRCLE ONE CATEGORY)

Never	1
Once or twice	2
Sometimes	3
Often	4
Don't know	8

DSM9. In the past year, have you risked or lost a significant relationship, job, educational or career opportunity because of gambling? Would you say it was ...

(CIRCLE ONE CATEGORY)

Never	1
Once or twice	2
Sometimes	3
Often	4
Don't know	8

DSM10. In the past year, have you sought help from others to provide money to relieve a desperate financial situation caused by gambling? Would you say it was ...

(CIRCLE ONE CATEGORY)

Never	1
Once or twice	2
Sometimes	3
Often	4
Don't know	8

SECTION IV: Life Events

The next few questions ask about important parts of some people's lives as they relate to gambling.

HIST1. Do you feel that either of your parents ever had a problem with betting money or gambling?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Hist1A
No	2	Skip to Hist2
Don't know	8	Skip to Hist2

HIST1A. Which parent was that?

(CIRCLE ALL THAT APPLY)

Father	1
Mother	2
Stepfather	3
Stepmother	4
Don't Know	8

HIST2. How old were you when you first gambled? If you do not gamble, write 0 and skip to HIST6.

HIST2A. What type of gambling was that?

HIST3. Was there any time when the amount you were gambling made you nervous?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Hist3A
No	2	Skip to Hist4
Don't know	8	Skip to Hist4

HIST3A. How old were you when that happened?

HIST3B. What type of gambling were you doing when that happened?

HIST4. Have you ever desired help to stop gambling?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Hist5
No	2	Skip to Hist6
Don't know	8	Skip to Hist6

HIST5. Have you ever sought help to stop gambling?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Hist5A
No	2	Skip to Hist6
Don't know	8	Skip to Hist6

HIST5A. What type of help was that?

HIST5B. If you stayed in a treatment program, how long was your stay at the treatment program? (Days)

_____ (Days)

HIST5C. If you sought counseling, how many counseling sessions, not including overnight stays at a treatment center, did you attend?

_____ (Sessions) Go to HIST6

HIST6. Have you ever sought help for depression or to stop using alcohol or other drugs?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Hist6A
No	2	Skip to Hist7
Don't know	8	Skip to Hist7

HIST6A. What type of help was that?

HIST6B. If you stayed in a treatment program, how long was your stay at the treatment program? (Days)

_____ (Days)

HIST6C. If you sought counseling, how many counseling sessions, not including overnight stays at a treatment center, did you attend?

_____ (Sessions) Go to HIST7

HIST7. Have you ever been involved in a case in bankruptcy court?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Hist7A
No	2	Skip to Hist8
Don't know	8	Skip to Hist8

HIST7A. Did you owe money in bankruptcy court or was money owed to you?

(CIRCLE ONE CATEGORY)

I owed money	1
I was owed money	2
Don't know	8

HIST8. How much money would you estimate you owe today as a result of gambling? If you do not gamble, write 0 and skip to the next section (Demographics).

HIST9. Over the last year, how much work or school have you missed due to gambling? If none write 0.

HIST10. In the past year have you been forced to take money or something else that didn't belong to you in order to pay for gambling?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Hist11
No	2	Skip to Hist12
Don't know	8	Skip to Hist12

HIST11. Were you arrested in the past year for going beyond what is strictly legal to gamble or to pay gambling debts?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

HIST12. In the past year have you had any arguments with people you live with over gambling that became physical?

(CIRCLE ONE CATEGORY)

Yes	1	Go to next section
No	2	Go to next section
Don't know	8	Go to next section

SECTION V: DEMOGRAPHICS

As you probably know, different types of people have different opinions and experiences. The following questions are for statistical purposes only and the answers to these questions, like all of the others, will be confidential.

DEMO1. Are you currently married, widowed, divorced, separated, or have you never been married?

(CIRCLE ONE CATEGORY)

Married, common-law, co-habitation	1
Widowed	2
Divorced	3
Separated	4
Never married	5

EDUC. What is the highest grade or level of school you have ever completed?

(CIRCLE ONE CATEGORY)

Less than high school	1
High school diploma or equivalency	2
Associate, two-year, junior college	3
Bachelor's degree	4
Master's degree	5
Doctorate	6
Professional (MD, JD, DDS, etc.)	7
Don't know	8

DEMO3. Last week, were you working full-time, part-time, going to school, keeping house, or something else?

(CIRCLE ONE CATEGORY)

Working full-time	1	Go to DEMO3A
Working part-time	2	Go to DEMO3A
Going to school	3	Go to DEMO3A
Keeping house	4	Skip to DEMO4
Disabled	5	Skip to DEMO4
Retired	6	Skip to DEMO4
Unemployed	7	Go to DEMO3A

DEMO3A. What kind of work do you normally do?

(CIRCLE ONE CATEGORY)

Farming/agriculture	1
Mining	2
Sales	3
Retail services	4
Other services	5
Clerical	6
Professional/technical	7
Manager/proprietor	8
Skilled, craftsman	9
Semi-skilled, operative	10
Laborer	11
Student	12
Other	13

DEMO4. How old were you on your last birthday?

DEMO5A. Are you of Spanish /Hispanic origin?

(CIRCLE ONE CATEGORY)

No, not Spanish/Hispanic	1
Yes, Mexican, Mexican Am., Chicano	2
Yes, Puerto Rican	3
Yes, Cuban	4
Yes, other Spanish/Hispanic	5

DEMO5B. What is your race?

(CIRCLE ONE OR MORE RACES)

White	1
American Indian or Alaskan Native	2
Asian or Pacific Islander	3
Black, African American, or Negro	4
Something Else	5

DEMO6. Which of the following best describes your current religious preference?

(CIRCLE ONE CATEGORY)

Protestant	1
Catholic	2
Jewish	3
Muslim	4
Buddhist	5
Christian Fundamentalist	6
American Indian	7
Mormon, LDS	8
Other	9
None	10
Don't know	98

DEMO7. What was the approximate annual income from employment and from all other sources for all members of your household, before taxes last year, in 1997? Was your total household income for 1997 ...

(CIRCLE ONE CATEGORY)

\$0 - \$9,999	1
\$10,000 - \$14,999	2
\$15,000 - \$19,999	3
\$20,000 - \$34,999	4
\$35,000 - \$49,000	5
\$50,000 - \$99,999	6
\$100,000 or more	7
Don't know	8

DEMO7A. How many persons in your household contribute to that income?

DEMO7B. During 1997 did anyone in your household receive any income from the following sources?

(CIRCLE ONE ON EACH LINE)

	Yes	No	Not Sure	If Yes, how much do you receive monthly?
a. Social Security or Railroad Retirement	1	2	8	\$_____per month
b. Other assistance payments like SSI, AFDC, WORC, food stamps	1	2	8	\$_____per month
c. Unemployment Compensation	1	2	8	\$_____per month
d. Veterans payments	1	2	8	\$_____per month

DEMO9. What is your sex?

(CIRCLE ONE CATEGORY)

Male	1
Female	2

THANK YOU VERY MUCH FOR YOUR TIME AND COOPERATION.

Appendix F

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Gambling Establishment Questionnaire

CONFIDENTIAL

SURVEY OF MONTANA GAMBLING ESTABLISHMENTS APRIL 1998

Prepared for: The Montana Gambling Study Commission
Established by the 55th Legislature of the State of Montana

Prepared by: The Bureau of Business and Economic Research
University of Montana - Missoula

USES OF THE DATA

The data from this survey will be used by state policy makers to assess the economic and social impacts of gambling in Montana. The information gathered by this survey may be used by the Montana Gambling Study Commission to make policy recommendations to the 56th Legislature and the Governor.

CONFIDENTIALITY

As a matter of policy, the Bureau of Business and Economic Research is required to protect the privacy of businesses and individuals participating in voluntary surveys. We want you to know that:

1. You may skip any questions you do not wish to answer.
2. We are asking these questions in order to gather information on the business of gambling in Montana and its economic impacts.
3. Your responses will be merged with those of others; and the answers you give will never be identified as yours.

WHAT YOU NEED TO COMPLETE THIS QUESTIONNAIRE:

This questionnaire is most easily completed if you have two documents on hand:

1. A copy of:
 - I.R.S. Form 1040 Schedule C, if your establishment is a sole proprietorship, **or**
 - I.R.S. Form 1065, if your establishment is a partnership, **or**
 - I.R.S. Form 1120, if your establishment is a corporation; **and**
2. A copy of the U.S. Census Bureau "Census of Businesses" questionnaire which you may have received and completed earlier this year.

GENERAL INSTRUCTIONS

This questionnaire was drafted for Montana businesses. After you complete this questionnaire, please return it using the enclosed, stamped envelope. If you have any questions, please contact:

Jim Sylvester
Bureau of Business and Economic Research
University of Montana - Missoula
Missoula, Montana 59812
(406) 243-5113
sylvestr@selway.umt.edu

PLEASE READ EACH QUESTION CAREFULLY. QUESTION INSTRUCTIONS ARE *ITALICIZED*.

GO TO THE NEXT PAGE AND BEGIN ➡

1. Physical Address

Is this establishment's physical address the same as shown in the label?

☐ Yes ☐ No - Report physical address below

(Address)

(City, State, Zipcode)

2. Legal Form of Organization

Which best describes this establishment's legal form of organization during 1997? *Mark only one box.*

- ☐ Individual owner (sole proprietorship)
☐ Partnership
☐ Limited liability partnership
☐ Government (specify) _____
☐ Corporation
☐ Other (specify) _____

3. Time In Business

How long has this establishment been in business?

- | | |
|---|---|
| <input type="checkbox"/> Less than 1 year | <input type="checkbox"/> 5-9 years |
| <input type="checkbox"/> 1-2 years | <input type="checkbox"/> 10 - 14 years |
| <input type="checkbox"/> 3-4 years | <input type="checkbox"/> 15 or more years |

4. Time Gambling Provided

How long has this establishment had gambling?

- | | |
|---|---|
| <input type="checkbox"/> Less than 1 year | <input type="checkbox"/> 5-9 years |
| <input type="checkbox"/> 1-2 years | <input type="checkbox"/> 10 - 14 years |
| <input type="checkbox"/> 3-4 years | <input type="checkbox"/> 15 or more years |

5. Tax Status

Is this establishment operated on a not-for-profit basis?

- ☐ Yes *skip to item 6b in the next column*
☐ No *go to item 6a*

6. Dollar Volume

a. Total sales of merchandise and other operating receipts of this (taxable) establishment for 1997

\$ _____

Skip to item 7 in the next column ➡

b. Revenue of this (tax-exempt) establishment in 1997:

\$ _____

7. Sources of Receipts or Revenue (1997)

Include any taxes collected from customers. These figures may be taken from your U.S. Census of Businesses questionnaire.

- a. Amusement machines
except video poker and
other gambling machines \$ _____
- b. Gross gambling receipts
include gambling machines,
scratch tickets, live keno
OTB, etc. \$ _____
- c. Net gambling receipts
after payment of
winnings \$ _____
- d. Membership dues and fees \$ _____
- e. Sales of foods and
nonalcoholic beverages \$ _____
- f. Sales of alcoholic beverages \$ _____
- g. Sales of fuel and lubricants \$ _____
- h. Sales of all other
merchandise \$ _____
- i. All other operating revenue \$ _____

*For taxable establishments, sum of lines a, b, d-i
should equal item 6a.*

- j. Contributions, gifts, grants \$ _____
- k. Investment income,
including interest and
dividends \$ _____

Go to the next page ➡

8. Expenses (1997)

These figures may be taken from the establishment's tax form. The appropriate Schedule C line number (in parenthesis) is provided for sole proprietors.

- a. Utilities, i.e. electricity, gas, water, telephone (line 25) \$ _____
- b. Payroll in 1997, before deductions (lines 14, 19, 26) \$ _____
- c. Rent for vehicles, machinery, and equipment **except video poker and other gambling machines** \$ _____
- d. Rent for other business property **except video poker and other gambling machines** \$ _____
- e. Rent for gambling machines like video poker \$ _____
- f. Purchase of gambling supplies and equipment \$ _____
- g. Purchase of other business supplies and equipment \$ _____
- h. Cost of goods sold (line 4) \$ _____
- i. Advertising (line 8) \$ _____
- j. Legal and professional services (line 17) \$ _____
- k. Repairs and maintenance (line 18) \$ _____
- l. Insurance other than health (line 15) \$ _____
- m. Interest for mortgage (line 16a) \$ _____
- n. Other interest (line 16b) \$ _____
- o. Taxes and license fees (line 23) \$ _____
- p. All other expenses \$ _____

9. Planned Expansion

Are you planning to expand or remodel your establishment in the next year?

- ☐ Yes (specify) _____
☐ No

10. Debt Service

a. Does your establishment have outstanding debt?

- ☐ Yes go to item 10b ☐ No skip to item 11

b. List the name and address of the institution which holds the largest dollar amount of your establishment's mortgage or real estate debt:

Name _____

Address _____

c. List the name and address of the institution which holds the largest dollar amount of your establishment's other debt:


Name _____

Address _____

11. Gambling Operations

Does your establishment provide any of the following gambling opportunities?

	Yes	No
a. Video Gambling Machines	<input type="checkbox"/>	<input type="checkbox"/>
b. Live Card Games	<input type="checkbox"/>	<input type="checkbox"/>
c. Live Keno/Bingo	<input type="checkbox"/>	<input type="checkbox"/>
d. Sports Pools/Tabs	<input type="checkbox"/>	<input type="checkbox"/>
e. Off-Track Betting	<input type="checkbox"/>	<input type="checkbox"/>
f. Lottery (Powerball, etc.)	<input type="checkbox"/>	<input type="checkbox"/>
g. Scratch-off Tickets	<input type="checkbox"/>	<input type="checkbox"/>
h. Other Gambling	<input type="checkbox"/>	<input type="checkbox"/>

Go to the next page 

12.

Please provide information on each of your establishment's employees as of the **week of November 1, 1997** in the table below. Sample entries are provided for a full-time (Jane) and a part-time (Bob) employee. When you have completed this section, go to question 13 below.

[illegible]

[illegible]

13. Gambling Machine Rental

Does your establishment rent/lease any of the video gambling machines at your location?

☐ Yes *go to item 13a* ☐ No *skip to item 14*

a. List the name and address of the route operator from whom you rent/lease any of your machines:

Name _____

Address _____

b. How many video gambling machines does your establishment rent/lease at your location?

14. Gambling Machine Ownership

Does your establishment own any of the video gambling machines at your location?

☐ Yes *go to item 14a* ☐ No *skip to item 15*

a. How many video gambling machines does your establishment own at your location?

15. Ownership, Control, and Locations of Operation

Is this company owned or controlled by another company?

☐ Yes → List the name and address of the owning or controlling company:

☐ No

16. Liquor License

Is the liquor license used by this establishment owned by another person(s) or firm?

☐ Yes → List the name and address of the owning or controlling company:

☐ No

17. Building or Land Ownership

Is the building or land used by this establishment owned by another person(s) or firm?

☐ Yes → List the name and address of the owning or controlling company:

☐ No

18. Residency of Partners and Corporate Officers

Answer only if your establishment is owned by a partnership or corporation. List the names and the state of residence of the partners or corporate officers who control your establishment:

Name	State of Residence
------	--------------------

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

THANK YOU FOR YOUR TIME AND ASSISTANCE!

Appendix G

.....
Gambers Anonymous Questionnaire



CONFIDENTIAL

**MONTANA GAMBLERS ANONYMOUS SURVEY
MAY 1998**

Prepared for: The Montana Gambling Study Commission
Established by the 55th Legislature of the State of Montana

Prepared by: The Bureau of Business and Economic Research
University of Montana - Missoula

USES OF THE DATA

The data from this survey will be used by state policy makers to assess the economic and social impacts of gambling in Montana. The information gathered by this survey may be used by the Montana Gambling Study Commission to make policy recommendations to the 56th Legislature and the Governor.

CONFIDENTIALITY

As a matter of policy, the Bureau of Business and Economic Research is required to protect the privacy of individuals who participate in voluntary surveys. We want you to know that:

1. You may skip any questions you do not wish to answer.
2. Do not identify yourself. Do not write your name or any other identifying information on this questionnaire or the postage-paid envelope provided.
3. The questionnaire asks about past gambling involvement, administers two pathological gambling screens, asks about life events associated with gambling, and gathers demographic data. We are asking these questions in order to gather information on gambling in Montana and its economic and social impacts.
4. Your responses will be merged with those of others, and the answers you give will never be identified as yours.
5. Your consent to participate in this study is implied by completing this questionnaire and returning it in the postage-paid envelope provided.

GENERAL INSTRUCTIONS

This questionnaire is intended only for members of Montana Gamblers Anonymous chapters. If you are a member of a Montana Gamblers Anonymous chapter please fill the questionnaire out and return it using the postage paid envelope provided. If you have any questions, please contact:

Jim Sylvester
Bureau of Business and Economic Research
University of Montana - Missoula
Missoula, Montana 59812
(406) 243-5113
sylvestr@selway.umd.edu

PLEASE READ EACH QUESTION CAREFULLY.

The questions on the next two pages are examples. It is important that you follow these directions for responding to each kind of question. They are:

A. (CIRCLE ONE)

What color are your eyes?

(CIRCLE ONE CATEGORY)

Brown	1
Blue	2
Green	3
Another color	4

If your eyes are green, you would circle the number 3 as shown.

B. (CIRCLE ONE ON EACH LINE)

Do you plan to do any of the following next week?

(CIRCLE ONE ON EACH LINE)

	Yes	No	Not Sure
a. Rent a videotape	1	2	3
b. Go to a baseball game	1	2	3
c. Have dinner at a friend's house	1	2	3

If you do not plan to rent a videotape, are not sure about going to a baseball game next week, and plan to have dinner at a friend's house, you would circle one item on each line as shown.

GENERAL INSTRUCTIONS: CONTINUED

C. (QUESTION WITH A SKIP)

a. Do you ever eat chocolate?

(CIRCLE ONE CATEGORY)

Yes
No

1

2

Go to b
Skip to c

b. Do you always brush your teeth after eating chocolate?

(CIRCLE ONE CATEGORY)

Yes
No

1

2

c. Last week, did you do any of the following?

(CIRCLE ONE ON EACH LINE)

Yes No

Saw a play

1

2

Went to a movie

1

2

Attended a sporting event

1

2

D. (CIRCLE ALL THAT APPLY)

When I go to a baseball game I:

(CIRCLE ALL THAT APPLY)

a. Buy a hotdog

1

b. Buy nachos

2

c. Buy popcorn

3

If you buy a hotdog and popcorn when you go to a baseball game, you would circle items 1 and 3 as shown.

 GO TO THE NEXT PAGE AND BEGIN

SECTION I: Gambling Involvement

People bet on many different things such as raffles, football games and card games. We are going to ask you about some activities such as these that you may have participated in.

FOR EACH TYPE OF GAMBLING, IF YOU NEVER ENGAGED IN THAT ACTIVITY, ANSWER NO AND SKIP TO NEXT TYPE OF GAMBLING.

IF YOU ENGAGED IN THE ACTIVITY IN YOUR LIFETIME, GO TO MONTHLY EXPENDITURE.

THEN GO TO PAST YEAR.

GAME1. Have you ever bet or spent money on instant lottery games such as scratch off tickets?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game1A
No	2	Skip to Game2
Don't Know	8	Skip to Game2

GAME1A. How much did you spend on instant lottery games in a typical month in the year before you entered Gamblers Anonymous? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so.

GAME1B. Have you bet or spent money on instant lottery games such as scratch off tickets in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game2
No	2	Go to Game2
Don't Know	8	Go to Game2

GAME2. Have you ever bet or spent money on other lottery games such as Wild Card, Powerball or Montana Cash?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game2A
No	2	Skip to Game3
Don't Know	8	Skip to Game3

GAME2A. How much did you spend on other lottery games such as Wild Card, Powerball or Montana Cash in a typical month in the year before you entered Gamblers Anonymous? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so.

GAME2B. Have you bet or spent money on other lottery games such as Wild Card, Powerball or Montana Cash in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game3
No	2	Go to Game3
Don't Know	8	Go to Game3

GAME3. Have you ever bet or spent money on live bingo?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game3A
No	2	Skip to Game4
Don't Know	8	Skip to Game4

GAME3A. How much did you spend on live bingo in a typical month in the year before you entered Gamblers Anonymous? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so.

GAME3B. Have you bet or spent money on live bingo in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game4
No	2	Go to Game4
Don't Know	8	Go to Game4

GAME4. Have you ever bet or spent money on live keno?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game4A
No	2	Skip to Game5
Don't Know	8	Skip to Game5

GAME4A. How much did you spend on live keno in a typical month in the year before you entered Gamblers Anonymous? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so.

GAME4B. Have you bet or spent money on live keno in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game
No	2	Go to Game
Don't Know	8	Go to Game

GAME5. Have you ever bet or spent money on charitable games including raffles, 50/50 tickets, casino or Las Vegas nights or other small-stakes games?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game5A
No	2	Skip to Game6
Don't Know	8	Skip to Game6

GAME5A. How much did you spend on charitable games in a typical month in the year before you entered Gamblers Anonymous? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so.

GAME5B. Have you bet or spent money on charitable games in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game6
No	2	Go to Game6
Don't Know	8	Go to Game6

GAME6. Have you ever bet or spent money on gaming machines including poker machines, keno machines, bingo machines, redball or pinball machines at a casino, gas station or convenience store in Montana?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game6A
No	2	Skip to Game7
Don't Know	8	Skip to Game7

GAME6A. How much did you spend on gaming machines in Montana in a typical month in the year before you entered Gamblers Anonymous? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so.

GAME6B. Have you bet or spent money on gaming machines in Montana in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game7
No	2	Go to Game7
Don't Know	8	Go to Game7

GAME7. Have you ever bet or spent money on card games at a Montana casino, bar or tavern?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game7A
No	2	Skip to Game8
Don't Know	8	Skip to Game8

GAME7A. How much did you spend on card games at a Montana casino, bar or tavern in a typical month in the year before you entered Gamblers Anonymous? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so.

GAME7B. Have you bet or spent money on card games at a Montana casino, bar or tavern in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game8
No	2	Go to Game8
Don't Know	8	Go to Game8

GAME8. Have you bet or spent money on gaming machines including poker machines, keno machines, bingo machines, slot machines, redball or pinball machines at an out-of-state casino?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game8A
No	2	Skip to Game9
Don't Know	8	Skip to Game9

GAME8A. How much did you spend on gaming machines at an out-of-state casino in a typical month in the year before you entered Gamblers Anonymous? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so.

GAME8B. Have you bet or spent money on gaming machines at an out-of-state casino in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game9
No	2	Go to Game9
Don't Know	8	Go to Game9

GAME9. Have you bet or spent money on card games, dice games or roulette at an out-of-state casino?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Game9A
No	2	Skip to Gamel0
Don't Know	8	Skip to Gamel0

GAME9A. How much did you spend on card games, dice games or roulette at an out-of-state casino in a typical month in the year before you entered Gamblers Anonymous? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so.

GAME9B. Have you bet or spent money on card games, dice games or roulette at an out-of-state casino in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel0
No	2	Go to Gamel0
Don't Know	8	Go to Gamel0

GAME10. Have you bet or spent money on high stakes private card games?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel0A
No	2	Skip to Gamel1
Don't Know	8	Skip to Gamel1

GAME10A. How much did you spend on high stakes private card games in a typical month in the year before you entered Gamblers Anonymous? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so.

GAME10B. Have you bet or spent money on high stakes private card games in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamell
No	2	Go to Gamell
Don't Know	8	Go to Gamell

GAME11. Have you bet or spent money on sports pools including office pools and sports tab games?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamella
No	2	Skip to Gamel2
Don't Know	8	Skip to Gamel2

GAME11A. How much did you spend on sports pools including office pools and sports tab games in a typical month in the year before you entered Gamblers Anonymous? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so.

GAME11B. Have you bet or spent money on sports pools including office pools and sports tab games in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel2
No	2	Go to Gamel2
Don't Know	8	Go to Gamel2

GAME12. Have you bet or spent money on the outcome of sports events with friends, acquaintances or a bookmaker?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel2A
No	2	Skip to Gamel3
Don't Know	8	Skip to Gamel3

GAME12A. How much did you spend on outcome of sports events with friends, acquaintances or a bookmaker in a typical month in the year before you entered Gamblers Anonymous? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so.

GAME12B. Have you bet or spent money on outcome of sports events with friends, acquaintances or a bookmaker in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel3
No	2	Go to Gamel3
Don't Know	8	Go to Gamel3

GAME13. Have you ever bet or spent money on horse or mule racing, on track, off-track or with a bookmaker?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel3A
No	2	Skip to Gamel4
Don't Know	8	Skip to Gamel4

GAME13A. How much did you spend on horse or mule racing, on track, off-track or with a bookmaker in a typical month in the year before you entered Gamblers Anonymous? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so.

GAME13B. Have you bet or spent money on horse or mule racing, on track, off-track or with a bookmaker in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel4
No	2	Go to Gamel4
Don't Know	8	Go to Gamel4

GAME14. Have you ever bowled, played pool, played golf or some other game of skill for money?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel4A
No	2	Skip to Gamel5
Don't Know	8	Skip to Gamel5

GAME14A. How much did you spend on bowling, playing pool, playing golf or some other games of skill for money in a typical month in the year before you entered Gamblers Anonymous? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so.

GAME14B. Have you bet or spent money on bowling, playing pool, playing golf or some other games of skill for money in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel5
No	2	Go to Gamel5
Don't Know	8	Go to Gamel5

GAME15. Have you ever bet or spent money on telephone or computer wagering, including the Internet or the Worldwide Web?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel5A
No	2	Skip to Gamel6
Don't Know	8	Skip to Gamel6

GAME16. Have you ever bet or spent money on any other type of gambling?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Gamel6A
No	2	Skip to Play1 on next page
Don't Know	8	Skip to Play1 on next page

GAME16A. How much did you spend on any other type of gambling in a typical month in the year before you entered Gamblers Anonymous? We are only looking for an approximate amount, rounded to the nearest 5 dollars or so.

GAME16B. Have you bet or spent money on any other type of gambling in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Play1 on next page
No	2	Go to Play1 on next page
Don't Know	8	Go to Play1 on next page

CONTINUE WITH PLAY1 ON THE NEXT PAGE.

PLAY1. Thinking about the sorts of activities just described, which involve an element of luck or chance, which was your favorite gambling activity in the year before you entered Gamblers Anonymous?

(CIRCLE ONE CATEGORY)

- a. Instant lottery games such as scratch off tickets
- b. Other lottery games such as Wild Card, Powerball, Montana Cash, Other
- c. Live bingo
- d. Live keno
- e. Charitable gaming including raffles, 50/50 tickets, casino or Las Vegas nights
- f. Gaming machines including poker machines, keno machines, bingo machines, redball or pinball machines at a casino, gas station or convenience store in Montana
- g. Card games at a Montana casino
- h. Gaming machines at an out-of-state casino
- i. Card games, dice games or roulette at an out-of-state casino
- j. High stakes private card games
- k. Sports pools including office pools and sports tab games
- l. Outcome of sports events with friends, acquaintances or a bookmaker
- m. Horse or mule racing, on track, off-track or with a bookmaker
- n. Bowling, pool, golf or some other game of skill for money
- o. Telephone or computer wagering
- p. Any other type of gambling

PLAY2. When participating in your favorite type of gambling in the year before you entered Gamblers Anonymous, what distance did you usually travel?

(CIRCLE ONE CATEGORY)

- | | |
|--------------------|---|
| 0 - 15 miles | 1 |
| 15 - 30 miles | 2 |
| 30 - 45 miles | 3 |
| 45 - 60 miles | 4 |
| More than 60 miles | 5 |
| Don't Know | 8 |

PLAY3. When participating in your favorite type of gambling in the year before you entered Gamblers Anonymous, did you usually do so:

(CIRCLE ONE CATEGORY)


- | | |
|-------------------------------------|---|
| Alone | 1 |
| With your spouse or partner | 2 |
| With other family members | 3 |
| With friends | 4 |
| With co-workers | 5 |
| With some other individual or group | 6 |
| Don't Know | 8 |

PLAY4. When participating in your favorite type of gambling in the year before you entered Gamblers Anonymous, did you usually do so for:

	(CIRCLE ONE CATEGORY)
Less than 1 hour	1
1 - 2 hours	2
3 - 5 hours	3
6 - 12 hours	4
More than 12 hours	5
Don't Know	8

PLAY5. For any of the types of gambling you have tried, what is the largest amount of money you have ever lost in one day gambling or wagering?

	(CIRCLE ONE CATEGORY)
Less than \$1	1
\$1 - \$9	2
\$10 - \$99	3
\$100 - \$999	4
\$1,000 - \$9,999	5
\$10,000 or more	6
Don't Know	8

GO TO NEXT PAGE 

SECTION II: Gambling Experiences

The next set of questions is part of a standard measurement scale which has been used throughout the United States. There are no right or wrong answers to the questions that follow. We want to know what your experiences have been. Please try to be as accurate as possible in your answers and remember that this information is confidential.

FOR SOGS1A TO SOGS20B, IF YOU ANSWER "NEVER" OR "NO" TO A, SKIP TO NEXT QUESTION, OTHERWISE GO TO B.

SOGS1A. When you participate in the gambling activities we have discussed, how often do you go back another day to win back money you lost? Is it:

(CIRCLE ONE CATEGORY)

Never	1	Skip to SOGS2A
Some of the time	2	Go to SOGS1B
Most of the time	3	Go to SOGS1B
Every time	4	Go to SOGS1B
Don't know	8	Skip to SOGS2A

SOGS1B. How often have you done this in the past year?

(CIRCLE ONE CATEGORY)

Never	1	Go to SOGS2A
Some of the time	2	Go to SOGS2A
Most of the time	3	Go to SOGS2A
Every time	4	Go to SOGS2A
Don't know	8	Go to SOGS2A

SOGS2A. Have you ever claimed to be winning money from these activities when in fact you lost?

(CIRCLE ONE CATEGORY)

Never	1	Skip to SOGS3A
Some of the time	2	Go to SOGS2B
Most of the time	3	Go to SOGS2B
Every time	4	Go to SOGS2B
Don't know	8	Skip to SOGS3A

SOGS2B. How often have you done this in the past year?

(CIRCLE ONE CATEGORY)

Never	1	Go to SOGS3A
Some of the time	2	Go to SOGS3A
Most of the time	3	Go to SOGS3A
Every time	4	Go to SOGS3A
Don't know	8	Go to SOGS3A

SOGS3A. Do you ever spend more time or money gambling than you intended?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS3B
No	2	Skip to SOGS4A
Don't know	8	Skip to SOGS4A

SOGS3B. Have you done this in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS4A. Have people ever criticized your gambling?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS4B
No	2	Skip to SOGS5A
Don't know	8	Skip to SOGS5A

SOGS4B. Have people criticized your gambling in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS5A. Have you ever felt guilty about the way you gamble or about what happens when you gamble?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS5B
No	2	Skip to SOGS6A
Don't know	8	Skip to SOGS6A

SOGS5B. Have you felt this way in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS6A. Have you ever felt that you would like to stop gambling, but didn't think that you could?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS6B
No	2	Skip to SOGS7A
Don't know	8	Skip to SOGS7A

SOGS6B. Have you felt this way in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS7A. Have you ever hidden betting slips, lottery tickets, gambling money or other signs of gambling from your spouse or partner, children, or other important people in your life?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS7B
No	2	Skip to SOGS8A
Don't know	8	Skip to SOGS8A

SOGS7B. Have you done so in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS8A. Have you ever argued with people you live with over how you handle money?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS8B
No	2	Skip to SOGS9A
Don't know	8	Skip to SOGS9A

SOGS8B. Have these arguments ever centered on your gambling?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS8C
No	2	Skip to SOGS9A
Don't know	3	Skip to SOGS9A

SOGS8C. Have you had any of these arguments in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS9A. Have you ever missed time from work or school due to gambling?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS9B
No	2	Skip to SOGS10A
Don't know	8	Skip to SOGS10A

SOGS9B. Have you missed time from work or school in the past year due to gambling?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

- SOGS10A. Have you ever borrowed money from someone and not paid them back as a result of your gambling?
(CIRCLE ONE CATEGORY)
- | | | |
|------------|---|-----------------|
| Yes | 1 | Go to SOGS10B |
| No | 2 | Skip to SOGS11A |
| Don't know | 8 | Skip to SOGS11A |
- SOGS10B. Have you done so in the past year?
(CIRCLE ONE CATEGORY)
- | | | |
|------------|---|--|
| Yes | 1 | |
| No | 2 | |
| Don't know | 8 | |
- SOGS11A. Have you ever borrowed from household money to gamble or pay gambling debts?
(CIRCLE ONE CATEGORY)
- | | | |
|------------|---|-----------------|
| Yes | 1 | Go to SOGS11B |
| No | 2 | Skip to SOGS12A |
| Don't know | 8 | Skip to SOGS12A |
- SOGS11B. Have you borrowed from household money in the past year?
(CIRCLE ONE CATEGORY)
- | | | |
|------------|---|--|
| Yes | 1 | |
| No | 2 | |
| Don't know | 8 | |
- SOGS12A. Have you ever borrowed money from your spouse or partner to gamble or pay gambling debts?
(CIRCLE ONE CATEGORY)
- | | | |
|------------|---|-----------------|
| Yes | 1 | Go to SOGS12B |
| No | 2 | Skip to SOGS13A |
| Don't know | 8 | Skip to SOGS13A |
- SOGS12B. Have you borrowed money from your spouse or partner in the past year?
(CIRCLE ONE CATEGORY)
- | | | |
|------------|---|--|
| Yes | 1 | |
| No | 2 | |
| Don't know | 8 | |
- SOGS13A. Have you ever borrowed from other relatives or in-laws to gamble or pay gambling debts?
(CIRCLE ONE CATEGORY)
- | | | |
|------------|---|-----------------|
| Yes | 1 | Go to SOGS13B |
| No | 2 | Skip to SOGS14A |
| Don't know | 8 | Skip to SOGS14A |

SOGS13B. Have you borrowed from other relatives or in-laws in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS14A. Have you ever gotten loans from banks, loan companies or credit unions to gamble or pay gambling debts?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS14B
No	2	Skip to SOGS15A
Don't know	8	Skip to SOGS15A

SOGS14B. Have you gotten loans from banks, loan companies or credit unions in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS15A. Have you ever made cash withdrawals on credit cards to get money to gamble or pay gambling debts? (DOES NOT INCLUDE INSTANT CASH CARDS FROM BANK ACCOUNTS)

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS15B
No	2	Skip to SOGS16A
Don't know	8	Skip to SOGS16A

SOGS15B. Have you made cash withdrawals on credit cards in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS16A. Have you ever gotten loans from loan sharks to gamble or pay gambling debts?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS16B
No	2	Skip to SOGS17A
Don't know	8	Skip to SOGS17A

SOGS16B. Have you gotten loans from loan sharks in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS17A. Have you ever cashed in stocks, bonds or other securities to finance gambling?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS17B
No	2	Skip to SOGS18A
Don't know	8	Skip to SOGS18A

SOGS17B. Have you cashed in stocks, bonds or other securities in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS18A. Have you ever sold personal or family property to gamble or pay gambling debts?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS18B
No	2	Skip to SOGS19A
Don't know	8	Skip to SOGS19A

SOGS18B. Have you sold personal or family property to gamble or pay gambling debts in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS19A. Have you ever borrowed from your checking account by writing checks that bounced to get money for gambling or to pay gambling debts?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS19B
No	2	Skip to SOGS20A
Don't know	8	Skip to SOGS20A

SOGS19B. Have you borrowed from your checking account by writing checks that bounced in the past year?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS20A. Do you feel that you have ever had a problem with betting money or gambling?

(CIRCLE ONE CATEGORY)

Yes	1	Go to SOGS20B
No	2	Skip to next section
Don't know	8	Skip to next section

SOGS20B. Do you feel that you have had a problem with betting money or gambling in the past year?

(CIRCLE ONE CATEGORY)

Yes	1	Go to next section
No	2	Go to next section
Don't know	8	Go to next section

SECTION III: Gambling Attitudes

The following are some questions about how you feel about your gambling. As before, this set of questions is part of a standard measurement scale. There are no right or wrong answers to the questions that follow. We want to know what your experiences have been. Please try to be as accurate as possible in your answers and remember that all this information is confidential.

DSM1. In the past year, have you often found yourself thinking about gambling, for example reliving past gambling experiences, planning the next time you will play or thinking of ways to get money to gamble? Would you say it was ...

(CIRCLE ONE CATEGORY)

Never	1
Once or twice	2
Sometimes	3
Often	4
Don't know	8

DSM2. In the past year, have you needed to gamble with more and more money to get the amount of excitement you are looking for? Would you say it was ...

(CIRCLE ONE CATEGORY)

Never	1
Once or twice	2
Sometimes	3
Often	4
Don't know	8

DSM3. In the past year, have you become restless or irritable when trying to cut down or stop gambling? Would you say it was ...

(CIRCLE ONE CATEGORY)

Never	1
Once or twice	2
Sometimes	3
Often	4
Don't know	8

DSM4. In the past year, have you gambled to escape from problems or when you were feeling depressed, anxious or bad about yourself? Would you say it was ...

(CIRCLE ONE CATEGORY)

Never	1
Once or twice	2
Sometimes	3
Often	4
Don't know	8

DSM5. In the past year, after losing money gambling, have you returned another day in order to get even? Would you say it was ...

(CIRCLE ONE CATEGORY)

Never	1
Once or twice	2
Sometimes	3
Often	4
Don't know	8

DSM6. In the past year, have you lied to your family or others to hide the extent of your gambling? Would you say it was ...

(CIRCLE ONE CATEGORY)

Never	1
Once or twice	2
Sometimes	3
Often	4
Don't know	8

DSM7. In the past year, have you made repeated unsuccessful attempts to control, cut back or stop gambling? Would you say it was ...

(CIRCLE ONE CATEGORY)

Never	1
Once or twice	2
Sometimes	3
Often	4
Don't know	8

DSM8. In the past year, have you been forced to go beyond what is strictly legal in order to finance gambling or to pay gambling debts? Would you say it was ...

(CIRCLE ONE CATEGORY)

Never	1
Once or twice	2
Sometimes	3
Often	4
Don't know	8

DSM9. In the past year, have you risked or lost a significant relationship, job, educational or career opportunity because of gambling? Would you say it was ...

(CIRCLE ONE CATEGORY)

Never	1
Once or twice	2
Sometimes	3
Often	4
Don't know	8

DSM10. In the past year, have you sought help from others to provide money to relieve a desperate financial situation caused by gambling? Would you say it was ...

(CIRCLE ONE CATEGORY)

Never	1
Once or twice	2
Sometimes	3
Often	4
Don't know	8

SECTION IV: Life Events

The next questions ask about important parts of some people's lives as they relate to gambling. You may skip any question you don't wish to answer, but we encourage you to answer each question.

HIST1. Do you feel that either of your parents ever had a problem with betting money or gambling?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Hist1A
No	2	Skip to Hist2
Don't know	8	Skip to Hist2

HIST1A. Which parent was that?

(CIRCLE ALL THAT APPLY)

Father	1
Mother	2
Stepfather	3
Stepmother	4
Don't Know	8

HIST2. How old were you when you first gambled?

HIST2A. What type of gambling was that?

HIST3. Was there any time when the amount you were gambling made you nervous?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Hist3A
No	2	Skip to Hist4
Don't know	8	Skip to Hist4

HIST3A. How old were you when that happened?

_____ Go to Hist3B

HIST3B. What type of gambling were you doing when that happened?

_____ Go to Hist4

HIST4. What type(s) of help have you sought to stop gambling?

(CIRCLE ALL THAT APPLY)

Family member	1	Skip to Hist5
Friend	2	Skip to Hist5
Family doctor	3	Go to Hist4A
Gamblers Anonymous	4	Skip to Hist5
Treatment program in Montana	5	Go to Hist4A
Treatment program outside Montana	6	Go to Hist4A
Veterans Administration	7	Go to Hist4A
Employee assistance program (EAP)	8	Go to Hist4A
Psychologist or psychiatrist	9	Go to Hist4A
Other counselor	10	Go to Hist4A
Minister/priest/rabbi	11	Skip to Hist5
Alcohol or drug abuse treatment program	12	Go to Hist4A
Hospital in STATE	13	Go to Hist4A
Hospital outside STATE	14	Go to Hist4A
Other	15	Go to Hist4A

Go to Hist4A if you are instructed to do so after any of your responses.
Otherwise, Skip to Hist5.

HIST4A. If you stayed overnight in a treatment program, how long was your stay at the treatment program?

_____ (Days)

HIST4B. If you sought counseling, how many counseling sessions, not including overnight stays at a treatment center, did you attend?

_____ (Sessions)

HIST5. How did you pay for this?
 (CIRCLE ALL THAT APPLY)

No payment needed	0	Go to Hist6
Medicare	1	Go to Hist6
Medicaid	2	Go to Hist6
Private Insurance	3	Go to Hist6
Champus/Tricare/VA	4	Go to Hist6
Self Pay	5	Go to Hist6
Other	6	Go to Hist6
Don't Know	8	Go to Hist6

HIST6. Have you ever sought help for ...?
 (CIRCLE ONE ON EACH LINE)

	Yes	No	
Depression	1	2	Yes go to Hist6a, No go to Hist7
Using alcohol	1	2	Yes go to Hist6a, No go to Hist7
Using other drugs	1	2	Yes go to Hist6a, No go to Hist7
Compulsive overeating	1	2	Yes go to Hist6a, No go to Hist7
Anorexia or Bulimia	1	2	Yes go to Hist6a, No go to Hist7
Compulsive shopping			
or spending	1	2	Yes go to Hist6A, No go to Hist7
Other problem	1	2	Yes go to Hist6A, No go to Hist7

HIST6A. What type(s) of help have you sought?
 (CIRCLE ALL THAT APPLY)

Family member	1	Skip to Hist7
Friend	2	Skip to Hist7
Family doctor	3	Go to Hist6B
Gamblers Anonymous	4	Skip to Hist7
Treatment program in Montana	5	Go to Hist6B
Treatment program outside Montana	6	Go to Hist6B
Veterans Administration	7	Go to Hist6B
Employee assistance program (EAP)	8	Go to Hist6B
Psychologist or psychiatrist	9	Go to Hist6B
Other counselor	10	Go to Hist6B
Minister/priest/rabbi	11	Skip to Hist7
Alcohol or drug abuse treatment program	12	Go to Hist6B
Hospital in STATE	13	Go to Hist6B
Hospital outside STATE	14	Go to Hist6B
Other	15	Go to Hist6B

HIST6B. If you stayed overnight in a treatment program, how long was your stay at the treatment program? (Days)

_____ (Days)

HIST6C. If you sought counseling, how many counseling sessions, not including overnight stays at a treatment center, did you attend?

_____ (Sessions)

HIST6D. How did you pay for this?

(CIRCLE ALL THAT APPLY)

Medicare	1	Go to HIST7
Medicaid	2	Go to HIST7
Private Insurance	3	Go to HIST7
Champus/Tricare/VA	4	Go to HIST7
Self Pay	5	Go to HIST7
Other	6	Go to HIST7
Don't Know	8	Go to HIST7

HIST7. Have you ever felt so low you wanted to die?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

HIST7A. Have you ever felt so low you thought of committing suicide?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

HIST7B. Have you ever felt so low you planned to commit suicide?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

HIST7C. Have you ever attempted suicide?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

HIST8. Have you ever been involved in a case in bankruptcy court?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Hist8A
No	2	Skip to Hist9
Don't know	8	Skip to Hist9

HIST8A. Did you owe money in bankruptcy court or was money owed to you?

(CIRCLE ONE CATEGORY)

I owed money	1
I was owed money	2
Don't know	8

HIST9. How much money would you estimate you owed as a result of your gambling when you came into GA (what showed up on your pressure relief form or your best estimate)? DO NOT INCLUDE BORROWING FOR CARS OR OTHER LEGITIMATE PURPOSES.

(CIRCLE ONE CATEGORY)

None	0
Less than \$1,000	1
\$1,000 - \$4,999	2
\$5,000 - \$9,999	3
\$10,000 - \$24,999	4
\$25,000 - \$49,999	5
\$50,000 - \$99,999	6
\$100,000 - \$249,999	7
\$250,000 or more	8

HIST10. How many days of work or school have you missed due to gambling?
If none write 0.

_____ (days)

HIST11. Have you ever been forced to take money or something else that didn't belong to you in order to pay for gambling?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Hist11A
No	2	Skip to Hist12
Don't know	8	Skip to Hist12

HIST11A. How much was that (worth) all together?

(CIRCLE ONE CATEGORY)

Less than \$100	0
\$100 - \$499	1
\$500 - \$999	2
\$1,000 - \$9,999	3
\$10,000 - \$24,999	4
\$25,000 - \$49,999	5
\$50,000 - \$99,999	6
\$100,000 - \$249,999	7
\$250,000 or more	8

HIST12. How many times have you been arrested?

(CIRCLE ONE CATEGORY)

Never	0	Skip to Hist15
Once	1	Go to Hist12A
Twice	2	Go to Hist12A
Three or more times	3	Go to Hist12A
Don't Know	8	Skip to Hist15

HIST12A. Were you ever arrested for going beyond what is strictly legal to gamble or to pay gambling debts?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Hist12B
No	2	Skip to Hist12C
Don't know	8	Skip to Hist12C

HIST12B. How many of your arrests were related to your gambling?

(CIRCLE ONE CATEGORY)

One	1
Two	2
Three or more	3
Don't Know	8

HIST12C. How many times have you been tried in court on gambling-related charges?

(CIRCLE ONE CATEGORY)

Never	0	Skip to Hist15
Once	1	Go to Hist12D
Twice	2	Go to Hist12D
Three or more times	3	Go to Hist12D
Don't Know	8	Skip to Hist15

HIST12D. How many times have you been convicted of gambling-related offences?

(CIRCLE ONE CATEGORY)

Never	0	Skip to Hist15
Once	1	Go to Hist13
Twice	2	Go to Hist13
Three or more times	3	Go to Hist13
Don't Know	8	Skip to Hist15

HIST13. Have you ever been placed on probation?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Hist13A
No	2	Go to Hist14
Don't know	8	Go to Hist14

HIST13A. Was the offence for which you were placed on probation related to your gambling?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Hist13B
No	2	Go to Hist13B
Don't know	8	Go to Hist13B

HIST13B. What was the offence?

Go to Hist14

HIST14. Have you ever been incarcerated?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Hist14A
No	2	Skip to Hist15
Don't know	8	Skip to Hist15

HIST14A. Was the offence for which you were incarcerated related to your gambling?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Hist14B
No	2	Skip to Hist15
Don't know	8	Skip to Hist15

HIST14B. What was the offence?

HIST14C. How many months did you serve in jail or prison for a gambling-related offence?

HIST15. How many times have you been sued to collect gambling-related debts?

(CIRCLE ONE CATEGORY)

Never	0
Once	1
Twice	2
Three or more times	3
Don't Know	8

HIST16. Have you ever been divorced?

(CIRCLE ONE CATEGORY)

Yes	1	Go to Hist16A
No	2	Skip to Hist17
Don't know	8	Skip to Hist17

HIST16A. Was this divorce at least partly related to your gambling?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

HIST17. Have you ever had any arguments with people you live with over gambling that became physical?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

HIST18. When did you first attend a Gamblers Anonymous meeting?

_____ (month and year)

HIST19. How many times have you gambled since you first attended a Gamblers Anonymous meeting?

(CIRCLE ONE CATEGORY)

Never	0
Once	1
Twice	2
Three times	3
Four times	4
Five or more times	5
Don't Know	8

SECTION V: Demographics

As you probably know, different types of people have different opinions and experiences. The following questions are for statistical purposes only and the answers to these questions, like all of the others, will be confidential.

DEMO1. Are you currently married, widowed, divorced, separated, or have you never been married?

(CIRCLE ONE CATEGORY)

Married, common-law, co-habitation	1
Widowed	2
Divorced	3
Separated	4
Never married	5

EDUC. What is the highest grade or level of school you have ever completed?

(CIRCLE ONE CATEGORY)

Less than high school	1
High school diploma or equivalency	2
Associate, two-year, junior college	3
Bachelor's degree	4
Master's degree	5
Doctorate	6
Professional (MD, JD, DDS, etc.)	7
Don't know	8

DEMO3. Last week, were you working full-time, part-time, going to school, keeping house, or something else?

(CIRCLE ONE CATEGORY)

Working full-time	1	Go to DEMO3A
Working part-time	2	Go to DEMO3A
Going to school	3	Skip to DEMO4
Keeping house	4	Skip to DEMO4
Disabled	5	Skip to DEMO4
Retired	6	Skip to DEMO4
Unemployed	7	Go to DEMO3A

DEMO3A. What kind of work do you normally do?

(CIRCLE ONE CATEGORY)

Farming/agriculture	1
Mining	2
Sales	3
Retail services	4
Other services	5
Clerical	6
Professional/technical	7
Manager/proprietor	8
Skilled, craftsman	9
Semi-skilled, operative	10
Laborer	11
Student	12
Other	13

DEMO4. How old were you on your last birthday?

DEMO5A. Are you of Spanish /Hispanic origin?

(CIRCLE ONE CATEGORY)

No, not Spanish/Hispanic	1
Yes, Mexican, Mexican Am., Chicano	2
Yes, Puerto Rican	3
Yes, Cuban	4
Yes, other Spanish/Hispanic	5

DEMO5B. What is your race?

(CIRCLE ONE OR MORE RACES)

White	1
American Indian or Alaskan Native	2
Asian or Pacific Islander	3
Black, African American, or Negro	4
Something Else	5

DEMO6. Which of the following best describes your current religious preference?

(CIRCLE ONE CATEGORY)

Protestant	1
Catholic	2
Jewish	3
Muslim	4
Buddhist	5
Christian Fundamentalist	6
American Indian	7
Mormon, LDS	8
Other	9
None	10
Don't know	98

DEMO7. What was the approximate annual income from employment and from all other sources for all members of your household, before taxes last year, in 1997? Was your total household income for 1997 ...

(CIRCLE ONE CATEGORY)

\$0 - \$9,999	1
\$10,000 - \$14,999	2
\$15,000 - \$19,999	3
\$20,000 - \$34,999	4
\$35,000 - \$49,000	5
\$50,000 - \$99,999	6
\$100,000 or more	7
Don't know	8

DEMO7A. How many persons in your household contribute to that income?

DEMO7B. During 1997 did anyone in your household receive any income from the following sources?

(CIRCLE ONE ON EACH LINE)

	Yes	No	Not Sure	If Yes, how much do you receive monthly?
a. Social Security or Railroad Retirement	1	2	8	\$ _____ per month
b. Other assistance payments like SSI, AFDC, WORC, food stamps	1	2	8	\$ _____ per month
c. Unemployment Compensation	1	2	8	\$ _____ per month
d. Veterans payments	1	2	8	\$ _____ per month

DEMO9. What is your sex?

(CIRCLE ONE CATEGORY)

Male

1

Female

2

THANK YOU VERY MUCH FOR YOUR TIME AND COOPERATION.



Appendix H

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Inpatient Data Elements



CONFIDENTIAL

**MONTANA TREATMENT CENTER SURVEY
MARCH 1998**

Prepared for: The Montana Gambling Commission
Established by the 55th Legislature of the State of Montana

Prepared by: The Bureau of Business and Economic Research
University of Montana - Missoula

USES OF THE DATA

The data from this survey will be used by state policy makers to assess the economic and social impacts of gambling in Montana. The information gathered by this survey may be used by the Montana Gambling Commission to make policy recommendations to the 56th Legislature and the Governor.

CONFIDENTIALITY

As a matter of policy, the Bureau of Business and Economic Research is required to protect the privacy of individuals and institutions which participate in voluntary surveys. We want you to know that:

1. We are gathering this data in order to learn about gambling in Montana and its economic and social impacts.
2. This patient's data will be merged with those of others, and will never be publically identified as the patient's.

INSTITUTION: _____

DATE: _____

RESEARCHER: _____



Section I: Demographics

- | | |
|--|---|
| 1. Chart Number _____ | 10. Number of persons contributing to household income: _____ |
| 2. Admission Dates: _____ | |
| <hr/> | |
| 3. Age _____ | 11. Employment Status: |
| 4. Gender F M | Working full-time 1 |
| | Working part-time 2 |
| 5. Marital Status: | Going to school 3 |
| Married, common-law, co-habitation 1 | Keeping house 4 |
| Widowed 2 | Disabled 5 |
| Divorced 3 | Retired 6 |
| Separated 4 | Unemployed 7 |
| Never married 5 | |
| 6. Educational Attainment: | 12. Work normally done: |
| Less than high school 1 | Farming/agriculture 1 |
| High school diploma or equivalency 2 | Mining 2 |
| Associate, two-year, junior college 3 | Sales 3 |
| Bachelor's degree 4 | Retail services 4 |
| Master's degree 5 | Other services 5 |
| Doctorate 6 | Clerical 6 |
| Professional (MD, JD, DDS, etc.) 7 | Professional/technical 7 |
| Don't know 8 | Manager/proprietor 8 |
| | Skilled, craftsman 9 |
| | Semi-skilled, operative 10 |
| | Laborer 11 |
| | Student 12 |
| | Other 13 |
| 7. Household Income: | 13. Spanish/Hispanic Origin: |
| \$0 - \$9,999 1 | No, not Spanish/Hispanic 1 |
| \$10,000 - \$14,999 2 | Yes, Mexican, Mexican Am., Chicano 2 |
| \$15,000 - \$19,999 3 | Yes, Puerto Rican 3 |
| \$20,000 - \$34,999 4 | Yes, Cuban 4 |
| \$35,000 - \$49,000 5 | Yes, other 5 |
| \$50,000 - \$99,999 6 | Spanish/Hispanic 5 |
| \$100,000 or more 7 | |
| Don't know 8 | 14. Race/Ethnicity |
| 8. Number of persons in household: _____ | White 1 |
| | American Indian or Alaskan Native 2 |
| 9. Number of adults in household: _____ | Asian or Pacific Islander 3 |
| | Black, African American, or Negro 4 |
| | Something Else 5 |

15. Religious Preference

Protestant	1
Catholic	2
Jewish	3
Muslim	4
Buddhist	5
Christian Fundamentalist	6
American Indian	7
Mormon, LDS	8
Other	9
None	10
Don't know	98

16. Number of months unemployed:

17. Primary Diagnosis:

18. Secondary Diagnosis:

Section II: SOGS-R Screen (IF ONLY SCORE AVAILABLE, ENTER HERE _____)

SOGS1A. When patient participates in the gambling activities, how often does patient go back another day to win back money patient lost? Is it:
(CIRCLE ONE CATEGORY)

Never	1
Some of the time	2
Most of the time	3
Every time	4
Don't know	8

SOGS2A. Has patient ever claimed to be winning money from these activities when in fact patient lost?

(CIRCLE ONE CATEGORY)

Never	1
Some of the time	2
Most of the time	3
Every time	4
Don't know	8

SOGS3A. Does patient ever spend more time or money gambling than patient intended?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS4A. Have people ever criticized patient's gambling?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS5A. Has patient ever felt guilty about the way patient gambles or about what happens when patient gambles?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS6A. Has patient ever felt that patient would like to stop gambling, but didn't think that patient could?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS7A. Has patient ever hidden betting slips, lottery tickets, gambling money or other signs of gambling from patient's spouse or partner, children, or other important people in patient's life?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS8A. Has patient ever argued with people patient lives with over how patient handles money?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS8B. Have these arguments ever centered on patient's gambling?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	3

SOGS9A. Has patient ever missed time from work or school due to gambling?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS10A. Has patient ever borrowed money from someone and not paid them back as a result of patient's gambling?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS11A. Has patient ever borrowed from household money to gamble or pay gambling debts?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS12A. Has patient ever borrowed money from patient's spouse or partner to gamble or pay gambling debts?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS13A. Has patient ever borrowed from other relatives or in-laws to gamble or pay gambling debts?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS14A. Has patient ever gotten loans from banks, loan companies or credit unions to gamble or pay gambling debts?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS15A. Has patient ever made cash withdrawals on credit cards to get money to gamble or pay gambling debts? (DOES NOT INCLUDE INSTANT CASH CARDS FROM BANK ACCOUNTS)

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS16A. Has patient ever gotten loans from loan sharks to gamble or pay gambling debts?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS17A. Has patient ever cashed in stocks, bonds or other securities to finance gambling?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS18A. Has patient ever sold personal or family property to gamble or pay gambling debts?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS19A. Has patient ever borrowed from patient's checking account by writing checks that bounced to get money for gambling or to pay gambling debts?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

SOGS20A. Does patient feel that patient has ever had a problem with betting money or gambling?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

Section III: DSM-IV Screen (IF ONLY SCORE AVAILABLE, ENTER HERE _____)

COMPLETE ONLY IF SOGS IS UNAVAILABLE. FOR EACH CHARACTERISTIC, MARK WHETHER PATIENT WAS DIAGNOSED AS EXHIBITING THIS DSM-IV CRITERIA FOR PATHOLOGICAL GAMBLING.

DSM1. Progression and preoccupation: In the past year, has patient often found self thinking about gambling, for example reliving past gambling experiences, planning the next time patient will play or thinking of ways to get money to gamble?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

DSM2. Tolerance: In the past year, has patient needed to gamble with more and more money to get the amount of excitement patient is looking for?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

DSM3. Withdrawal: In the past year, has patient become restless or irritable when trying to cut down or stop gambling?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

DSM4. Escape: In the past year, has patient gambled to escape from problems or when patient was feeling depressed, anxious or bad about self?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

DSM5. Chasing: In the past year, after losing money gambling, has patient returned another day in order to get even?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

DSM6. Denial: In the past year, has patient lied to patient's family or others to hide the extent of patient's gambling?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

DSM7. Compulsion: In the past year, has patient made repeated unsuccessful attempts to control, cut back or stop gambling?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

DSM8. Illegal activity: In the past year, has patient been forced to go beyond what is strictly legal in order to finance gambling or to pay gambling debts?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

DSM9. Jeopardize family or career: In the past year, has patient risked or lost a significant relationship, job, educational or career opportunity because of gambling?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

DSM10. Bail out: In the past year, has patient sought help from others to provide money to relieve a desperate financial situation caused by gambling?

(CIRCLE ONE CATEGORY)

Yes	1
No	2
Don't know	8

Section IV: LIFE EVENTS

1. How old were you when you first gambled?

2. Which gambling activity(ies) did patient engage in?

(CIRCLE ALL THAT APPLY)

- a. Instant lottery games such as scratch off tickets
- b. Other lottery games such as Wild Card, Powerball, Montana Cash, Other
- c. Live bingo
- d. Live keno
- e. Charitable gaming including raffles, 50/50 tickets, casino or Las Vegas nights
- f. Gaming machines including poker machines, keno machines, bingo machines, redball or pinball machines at a casino, gas station or convenience store in Montana
- g. Card games at a Montana casino
- h. Gaming machines at an out-of-state casino
- i. Card games, dice games or roulette at an out-of-state casino
- j. High stakes private card games
- k. Sports pools including office pools and sports tab games
- l. Outcome of sports events with friends, acquaintances or a bookmaker
- m. Horse or mule racing, on track, off-track or with a bookmaker
- n. Bowled, played pool, played golf or some other game of skill for money
- o. Telephone or computer wagering
- p. Any other type of gambling

3. Do/did patient's parents have a problem with betting money or gambling?

Yes	1
No	2
Don't know	8

5. Describe experience with criminal justice system (time spent on probation, number of months in prison, number of arrests):

4. Which parent was that?

(CIRCLE ALL THAT APPLY)

Father	1
Mother	2
Stepfather	3
Stepmother	4
Don't Know	8

6. Describe experience with domestic violence:

7. Has patient ever filed for bankruptcy?

Yes	1
No	2
Don't know	8

8. Has patient ever been sued in civil court?

Yes	1
No	2
Don't know	8

9. How much did patient owe at start of treatment?

\$ _____

10. Number of work or school days lost due to gambling:

11. Has patient ever lost a job due to gambling?

Yes	1
No	2
Don't know	8

12. Has patient ever had suicidal thoughts?

Yes	1
No	2
Don't know	8

13. Has patient ever engaged in suicidal behavior?

Yes	1
No	2
Don't know	8

14. Has patient ever sought help for drug problem?

Yes	1
No	2
Don't know	8

15. Has patient ever sought help for alcohol problem?

Yes	1
No	2
Don't know	8

16. Has patient ever sought help for depression?

Yes	1
No	2
Don't know	8

17. Describe type(s) of help sought:

18. How long has patient been treated for gambling as an inpatient (days)?

19. How many outpatient counseling sessions has patient attended for gambling?

20. How long has patient been treated for drug, alcohol, or depression problem as an inpatient (days)?

21. How many outpatient counseling sessions has patient attended for drug, alcohol, or depression problem?

22. Mode of payment for help seeking
(gambling)?

Self-pay	1
Medicare/Medicaid	2
Private Insurance	3
Other	4
DK	8

23. Mode of payment for help seeking
(drug, alcohol, or depression)?

Self-pay	1
Medicare/Medicaid	2
Private Insurance	3
Other	4
DK	8

24. Amount Stolen by Patient?

25. Cost of treatment at
Rimrock/Rocky Mountain:

Notes:

Appendix I

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Household Survey Frequencies

Weighted Household Sample - Games played

Instant lottery games

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	751	61.2	61.3	61.3
	Did not play	475	38.7	38.7	100.0
	Total	1226	99.9	100.0	
Missing	REFUSED	1	.1		
Total		1227	100.0		

Instant lottery games past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	390	31.8	31.8	31.8
	Did not play	359	29.3	29.3	61.1
	NA-LEGIT SKIP	476	38.8	38.8	99.9
	Can not recall	1	.1	.1	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Instant lottery games once a week

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	28	2.3	7.1	7.1
	Did not play	362	29.5	92.9	100.0
	Total	390	31.8	100.0	
Missing	NA-LEGIT SKIP	837	68.2		
Total		1227	100.0		

Other lottery games

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	604	49.2	49.2	49.2
	Did not play	622	50.7	50.7	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Other lottery games past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	443	36.1	36.1	36.1
	Did not play	158	12.9	12.9	49.0
	NA-LEGIT SKIP	623	50.8	50.8	99.8
	Can not recall	2	.2	.2	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Other lottery games once a week

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	94	7.7	21.2	21.2
	Did not play	349	28.4	78.8	100.0
	Total	443	36.1	100.0	
Missing	NA-LEGIT SKIP	784	63.9		
Total		1227	100.0		

Live bingo

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	270	22.0	22.0	22.0
	Did not play	954	77.8	77.8	99.8
	Can not recall	1	.1	.1	99.8
	REFUSED	2	.2	.2	100.0
	Total	1227	100.0	100.0	

Live bingo past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	83	6.7	6.7	6.7
	Did not play	187	15.3	15.3	22.0
	NA-LEGIT SKIP	957	78.0	78.0	100.0
	Total	1227	100.0	100.0	

Live bingo once a week

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	7	.5	8.1	8.1
	Did not play	76	6.2	91.9	100.0
	Total	83	6.7	100.0	
Missing	NA-LEGIT SKIP	1144	93.3		
Total		1227	100.0		

Live Keno

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	343	28.0	28.0	28.0
	Did not play	883	71.9	71.9	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Live Keno past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	177	14.5	14.5	14.5
	Did not play	165	13.4	13.4	27.9
	NA-LEGIT SKIP	884	72.0	72.0	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Live Keno once a week

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	19	1.5	10.6	10.6
	Did not play	159	12.9	89.4	100.0
	Total	177	14.5	100.0	
Missing	NA-LEGIT SKIP	1050	85.5		
Total		1227	100.0		

Charitable games

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	787	64.1	64.1	64.1
	Did not play	438	35.7	35.7	99.8
	Can not recall	1	.1	.1	99.9
	REFUSED	2	.1	.1	100.0
	Total	1227	100.0	100.0	

Charitable games past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	583	47.5	47.5	47.5
	Did not play	200	16.3	16.3	63.8
	NA-LEGIT SKIP	440	35.9	35.9	99.7
	Can not recall	4	.3	.3	100.0
	Total	1227	100.0	100.0	

Charitable games once a week

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	20	1.6	3.4	3.4
	Did not play	563	45.9	96.6	100.0
	Total	583	47.5	100.0	
Missing	NA-LEGIT SKIP	644	52.5		
Total		1227	100.0		

Gaming machine in Montana

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	613	50.0	50.0	50.0
	Did not play	611	49.8	49.8	99.8
	REFUSED	2	.2	.2	100.0
	Total	1227	100.0	100.0	

Gaming machine in Montana past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	474	38.6	38.6	38.6
	Did not play	138	11.3	11.3	49.9
	NA-LEGIT SKIP	614	50.0	50.0	99.9
	Can not recall	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Gaming machine in Montana once a week

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	108	8.8	22.8	22.8
	Did not play	365	29.7	77.0	99.8
	Can not recall	1	.1	.2	100.0
	Total	474	38.6	100.0	
Missing	NA-LEGIT SKIP	753	61.4		
Total		1227	100.0		

Card games in Montana

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	70	5.7	5.7	5.7
	Did not play	1156	94.2	94.2	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Card games in Montana past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	24	2.0	2.0	2.0
	Did not play	46	3.8	3.8	5.7
	NA-LEGIT SKIP	1157	94.3	94.3	100.0
	Total	1227	100.0	100.0	

Card games in Montana once a week

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	5	.4	21.6	21.6
	Did not play	19	1.5	78.4	100.0
	Total	24	2.0	100.0	
Missing	NA-LEGIT SKIP	1203	98.0		
Total		1227	100.0		

Gaming machines outside Montana

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	460	37.5	37.5	37.5
	Did not play	766	62.5	62.5	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Gaming machines outside Montana past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	157	12.8	12.8	12.8
	Did not play	302	24.6	24.6	37.4
	NA-LEGIT SKIP	767	62.5	62.5	99.9
	Can not recall	2	.1	.1	100.0
	Total	1227	100.0	100.0	

Gaming machines outside Montana once a week

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	2	.2	1.2	1.2
	Did not play	155	12.6	98.8	100.0
	Total	157	12.8	100.0	
Missing	NA-LEGIT SKIP	1070	87.2		
Total		1227	100.0		

Table games outside Montana

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	182	14.9	14.9	14.9
	Did not play	1044	85.1	85.1	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Table games outside Montana past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	45	3.7	3.7	3.7
	Did not play	137	11.2	11.2	14.9
	NA-LEGIT SKIP	1045	85.1	85.1	100.0
	Total	1227	100.0	100.0	

Table games outside Montana once a week

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Did not play	45	3.7	100.0	100.0
Missing	NA-LEGIT SKIP	1182	96.3		
Total		1227	100.0		

High stakes card games

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	21	1.7	1.7	1.7
	Did not play	1204	98.1	98.1	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

High stakes card games past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	7	.6	.6	.6
	Did not play	14	1.2	1.2	1.7
	NA-LEGIT SKIP	1206	98.3	98.3	100.0
	Total	1227	100.0	100.0	

High stakes card games once a week

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Did not play	7	.6	100.0	100.0
Missing	NA-LEGIT SKIP	1220	99.4		
Total		1227	100.0		

Sports pools

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	453	37.0	37.0	37.0
	Did not play	771	62.8	62.8	99.8
	Can not recall	1	.1	.1	99.8
	REFUSED	2	.2	.2	100.0
	Total	1227	100.0	100.0	

Sports pools past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	261	21.3	21.3	21.3
	Did not play	192	15.7	15.7	37.0
	NA-LEGIT SKIP	774	63.0	63.0	100.0
	Total	1227	100.0	100.0	

Sports pools once a week

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	18	1.4	6.7	6.7
	Did not play	244	19.8	93.3	100.0
	Total	261	21.3	100.0	
Missing	NA-LEGIT SKIP	966	78.7		
Total		1227	100.0		

Outcome of sports events

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	330	26.9	26.9	26.9
	Did not play	894	72.9	72.9	99.7
	Can not recall	2	.1	.1	99.8
	REFUSED	2	.2	.2	100.0
	Total	1227	100.0	100.0	

Outcome of sports events past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	220	17.9	17.9	17.9
	Did not play	109	8.9	8.9	26.8
	NA-LEGIT SKIP	897	73.1	73.1	99.9
	Can not recall	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Outcome of sports events once a week

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	9	.7	3.9	3.9
	Did not play	211	17.2	96.1	100.0
	Total	220	17.9	100.0	
Missing	NA-LEGIT SKIP	1007	82.1		
Total		1227	100.0		

Horse racing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	302	24.6	24.6	24.6
	Did not play	925	75.4	75.4	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Horse racing past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	59	4.8	4.8	4.8
	Did not play	242	19.7	19.7	24.6
	NA-LEGIT SKIP	925	75.4	75.4	100.0
	Total	1227	100.0	100.0	

Horse racing once a week

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	3	.3	5.5	5.5
	Did not play	56	4.5	94.5	100.0
	Total	59	4.8	100.0	
Missing	NA-LEGIT SKIP	1168	95.2		
Total		1227	100.0		

Games of skill for money

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	165	13.5	13.5	13.5
	Did not play	1060	86.4	86.4	99.9
	Can not recall	1	.1	.1	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Games of skill for money past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	91	7.5	7.5	7.5
	Did not play	74	6.0	6.0	13.5
	NA-LEGIT SKIP	1062	86.5	86.5	100.0
	Total	1227	100.0	100.0	

Games of skill for money once a week

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	29	2.4	32.0	32.0
	Did not play	62	5.1	68.0	100.0
	Total	91	7.5	100.0	
Missing	NA-LEGIT SKIP	1136	92.5		
Total		1227	100.0		

Telephone or computer wagering

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	5	.4	.4	.4
	Did not play	1222	99.6	99.6	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Telephone or computer wagering past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	3	.3	.3	.3
	Did not play	1	.1	.1	.4
	NA-LEGIT SKIP	1222	99.6	99.6	100.0
	Total	1227	100.0	100.0	

Telephone or computer wagering once a week

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	2	.2	66.8	66.8
	Did not play	1	.1	33.2	100.0
	Total	3	.3	100.0	
Missing	NA-LEGIT SKIP	1224	99.7		
Total		1227	100.0		

Other type of gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	45	3.6	3.6	3.6
	Did not play	1180	96.2	96.2	99.8
	Can not recall	1	.1	.1	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Other type of gambling past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	25	2.0	2.0	2.0
	Did not play	20	1.6	1.6	3.6
	NA-LEGIT SKIP	1182	96.4	96.4	100.0
	Total	1227	100.0	100.0	

Other type of gambling once a week

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	4	.3	.3	.3
	Did not play	20	1.6	1.6	1.9
	NA-LEGIT SKIP	1202	98.0	98.0	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Stated favorite game

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No favorite stated	103	8.4	8.4	8.4
	Instant lottery	48	3.9	3.9	12.4
	Other lottery	92	7.5	7.5	19.9
	Live bingo	31	2.6	2.6	22.4
	Live Keno	26	2.1	2.1	24.6
	Charitable games	73	6.0	6.0	30.5
	In-state machines	250	20.4	20.4	50.9
	MT card games	14	1.1	1.1	52.1
	Out-state machines	67	5.5	5.5	57.5
	Out-state table games	28	2.3	2.3	59.8
	High stakes cards	2	.1	.1	59.9
	Sports pools	54	4.4	4.4	64.3
	Sports events w/friends	42	3.4	3.4	67.7
	Track betting	54	4.4	4.4	72.1
	Games of skill	22	1.8	1.8	73.9
	Computer wagering	1	.1	.1	74.0
	Other game	5	.4	.4	74.4
	Small stakes cards	45	3.7	3.7	78.1
	LEGITIMATE SKIP	126	10.3	10.3	88.3
	DK	109	8.9	8.9	97.2
	REFUSED	34	2.8	2.8	100.0
	Total	1227	100.0	100.0	

Distance traveled to play favorite

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-5 miles	687	56.0	56.0	56.0
	6-10 miles	95	7.7	7.7	63.7
	11-15 miles	38	3.1	3.1	66.8
	16-30 miles	52	4.3	4.3	71.1
	31-45 miles	19	1.5	1.5	72.6
	More than 45 miles	159	13.0	13.0	85.5
	LEGITIMATE SKIP	126	10.3	10.3	95.8
	REFUSED	52	4.2	4.2	100.0
	Total	1227	100.0	100.0	

Play with...

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Alone	345	28.1	28.1	28.1
	With partner	247	20.1	20.1	48.2
	With other family	125	10.2	10.2	58.4
	With friends	283	23.1	23.1	81.5
	With coworkers	36	2.9	2.9	84.5
	With someone else	13	1.1	1.1	85.6
	LEGITIMATE SKIP	126	10.3	10.3	95.8
	REFUSED	51	4.2	4.2	100.0
	Total	1227	100.0	100.0	

Time play....

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less thn 1 hour	678	55.3	55.3	55.3
	1-2 hours	217	17.7	17.7	73.0
	3-5 hours	115	9.4	9.4	82.4
	6-12 hours	31	2.6	2.6	84.9
	More thn 12 hours	9	.7	.7	85.6
	LEGITIMATE SKIP	126	10.3	10.3	95.9
	REFUSED	50	4.1	4.1	100.0
	Total	1227	100.0	100.0	

Largest amount ever wagered

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less thn \$1	106	8.6	8.6	8.6
	\$1-9	430	35.1	35.1	43.7
	\$10-99	403	32.9	32.9	76.6
	\$100-999'	110	8.9	8.9	85.5
	\$1,000-9,999	34	2.8	2.8	88.3
	LEGITIMATE SKIP	126	10.3	10.3	98.5
	REFUSED	18	1.5	1.5	100.0
	Total	1227	100.0	100.0	

Weighted household survey - Individual SOGS Items

Gamble to recoup losses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	958	78.1	78.1	78.1
	Sometimes	127	10.4	10.4	88.5
	Most of time	8	.7	.7	89.1
	Always	4	.4	.4	89.5
	LEGITIMATE SKIP	126	10.3	10.3	99.8
	DK	1	.1	.1	99.8
	REFUSED	2	.2	.2	100.0
	Total	1227	100.0	100.0	

SOGS1B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	47	3.8	3.8	3.8
	Sometimes	82	6.7	6.7	10.5
	Most of time	6	.5	.5	11.0
	Always	5	.4	.4	11.4
	LEGITIMATE SKIP	1087	88.6	88.6	100.0
	Total	1227	100.0	100.0	

Claimed to win when actually lost

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	1062	86.5	86.5	86.5
	Sometimes	35	2.8	2.8	89.4
	Most of time	3	.2	.2	89.6
	LEGITIMATE SKIP	126	10.3	10.3	99.8
	DK	1	.1	.1	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

SOGS2B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	16	1.3	1.3	1.3
	Sometimes	20	1.6	1.6	2.9
	Most of time	2	.2	.2	3.0
	LEGITIMATE SKIP	1190	97.0	97.0	100.0
	Total	1227	100.0	100.0	

Spend more gambling than intended

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	184	15.0	15.0	15.0
	No	915	74.5	74.5	89.5
	NA-LEGIT SKIP	126	10.3	10.3	99.8
	DK	1	.1	.1	99.9
	REFUSED	2	.1	.1	100.0
	Total	1227	100.0	100.0	

SOGS3B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	117	9.5	9.5	9.5
	No	65	5.3	5.3	14.8
	NA-LEGIT SKIP	1043	85.0	85.0	99.8
	REFUSED	2	.2	.2	100.0
	Total	1227	100.0	100.0	

People critized your gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	63	5.1	5.1	5.1
	No	1037	84.5	84.5	89.7
	NA-LEGIT SKIP	126	10.3	10.3	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

SOGS4B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	43	3.5	3.5	3.5
	No	20	1.6	1.6	5.1
	NA-LEGIT SKIP	1164	94.9	94.9	100.0
	Total	1227	100.0	100.0	

Felt guilty about gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	102	8.3	8.3	8.3
	No	997	81.2	81.2	89.5
	NA-LEGIT SKIP	126	10.3	10.3	99.8
	REFUSED	3	.2	.2	100.0
	Total	1227	100.0	100.0	

SOGS5B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	57	4.7	4.7	4.7
	No	44	3.6	3.6	8.3
	NA-LEGIT SKIP	1125	91.7	91.7	100.0
	Total	1227	100.0	100.0	

Like to stop but can not

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	22	1.8	1.8	1.8
	No	1073	87.4	87.4	89.3
	NA-LEGIT SKIP	126	10.3	10.3	99.5
	DK	2	.2	.2	99.7
	REFUSED	3	.3	.3	100.0
	Total	1227	100.0	100.0	

SOGS6B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	17	1.4	1.4	1.4
	No	6	.4	.4	1.8
	NA-LEGIT SKIP	1205	98.2	98.2	100.0
	Total	1227	100.0	100.0	

Hidden gambling from others

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	18	1.4	1.4	1.4
	No	1081	88.1	88.1	89.6
	NA-LEGIT SKIP	126	10.3	10.3	99.8
	REFUSED	2	.2	.2	100.0
	Total	1227	100.0	100.0	

SOGS7B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	12	1.0	1.0	1.0
	No	5	.4	.4	1.4
	NA-LEGIT SKIP	1209	98.6	98.6	100.0
	Total	1227	100.0	100.0	

SOGS8A

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	175	14.3	14.3	14.3
	No	924	75.3	75.3	89.6
	NA-LEGIT SKIP	126	10.3	10.3	99.9
	DK	1	.1	.1	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Argued about money and gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	8	.7	.7	.7
	No	167	13.6	13.6	14.3
	NA-LEGIT SKIP	1052	85.7	85.7	100.0
	Total	1227	100.0	100.0	

SOGS8C

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	6	.5	.5	.5
	No	2	.2	.2	.7
	NA-LEGIT SKIP	1219	99.3	99.3	100.0
	Total	1227	100.0	100.0	

Missed work due to gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	7	.6	.6	.6
	No	1094	89.2	89.2	89.7
	NA-LEGIT SKIP	126	10.3	10.3	100.0
	Total	1227	100.0	100.0	

SOGS9B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	4	.3	.3	.3
	No	3	.3	.3	.6
	NA-LEGIT SKIP	1220	99.4	99.4	100.0
	Total	1227	100.0	100.0	

Borrowed money not paid back

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	12	1.0	1.0	1.0
	No	1089	88.7	88.7	89.7
	NA-LEGIT SKIP	126	10.3	10.3	100.0
	Total	1227	100.0	100.0	

SOGS10B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	6	.5	.5	.5
	No	6	.5	.5	1.0
	NA-LEGIT SKIP	1215	99.0	99.0	100.0
	Total	1227	100.0	100.0	

Used household money for gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	34	2.8	2.8	2.8
	No	1065	86.8	86.8	89.6
	NA-LEGIT SKIP	126	10.3	10.3	99.8
	DK	1	.1	.1	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

SOGS11B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	19	1.5	1.5	1.5
	No	15	1.3	1.3	2.8
	NA-LEGIT SKIP	1193	97.2	97.2	100.0
	Total	1227	100.0	100.0	

Borrowed money spouse for gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	41	3.3	3.3	3.3
	No	1059	86.3	86.3	89.6
	NA-LEGIT SKIP	126	10.3	10.3	99.9
	DK	1	.0	.0	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

SOGS12B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	28	2.3	2.3	2.3
	No	13	1.0	1.0	3.3
	NA-LEGIT SKIP	1186	96.7	96.7	100.0
	Total	1227	100.0	100.0	

Borrowed money other relatives for gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	22	1.8	1.8	1.8
	No	1078	87.8	87.8	89.7
	NA-LEGIT SKIP	126	10.3	10.3	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

SOGS13B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	10	.8	.8	.8
	No	12	1.0	1.0	1.8
	NA-LEGIT SKIP	1205	98.2	98.2	100.0
	Total	1227	100.0	100.0	

Borrowed money from financial institution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	7	.5	.5	.5
	No	1093	89.1	89.1	89.7
	NA-LEGIT SKIP	126	10.3	10.3	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

SOGS14B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	3	.2	.2	.2
	No	4	.3	.3	.5
	NA-LEGIT SKIP	1220	99.5	99.5	100.0
	Total	1227	100.0	100.0	

Cash withdrawals on credit cards for gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	45	3.6	3.6	3.6
	No	1055	86.0	86.0	89.7
	NA-LEGIT SKIP	126	10.3	10.3	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

SOGS15B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	23	1.9	1.9	1.9
	No	21	1.7	1.7	3.6
	NA-LEGIT SKIP	1182	96.4	96.4	100.0
	Total	1227	100.0	100.0	

Money from loan sharks for gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	2	.1	.1	.1
	No	1098	89.5	89.5	89.7
	NA-LEGIT SKIP	126	10.3	10.3	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

SOGS16B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	1	.1	.1	.1
	No	1	.1	.1	.1
	NA-LEGIT SKIP	1225	99.9	99.9	100.0
	Total	1227	100.0	100.0	

Cased in stocks & bonds for gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	3	.2	.2	.2
	No	1097	89.4	89.4	89.7
	NA-LEGIT SKIP	126	10.3	10.3	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

SOGS17B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	3	.2	.2	.2
	NA-LEGIT SKIP	1224	99.8	99.8	100.0
	Total	1227	100.0	100.0	

Sold property for gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	10	.8	.8	.8
	No	1090	88.9	88.9	89.7
	NA-LEGIT SKIP	126	10.3	10.3	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

SOGS18B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	1	.1	.1	.1
	No	8	.7	.7	.8
	NA-LEGIT SKIP	1217	99.2	99.2	100.0
	Total	1227	100.0	100.0	

Bounced checks for gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	18	1.5	1.5	1.5
	No	1082	88.2	88.2	89.7
	NA-LEGIT SKIP	126	10.3	10.3	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

SOGS19B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	9	.7	.7	.7
	No	9	.8	.8	1.5
	NA-LEGIT SKIP	1209	98.5	98.5	100.0
	Total	1227	100.0	100.0	

Feel you had a gambling problem

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	40	3.2	3.2	3.2
	No	1061	86.4	86.4	89.7
	NA-LEGIT SKIP	126	10.3	10.3	99.9
	DK	1	.1	.1	100.0
	Total	1227	100.0	100.0	

SOGS20B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	20	1.6	1.6	1.6
	No	19	1.6	1.6	3.2
	NA-LEGIT SKIP	1187	96.8	96.8	100.0
	Total	1227	100.0	100.0	

Weighted Household Survey - DSM Individual Items

Think about gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	983	80.1	80.1	80.1
	Once or twice	83	6.7	6.7	86.8
	Sometimes	25	2.1	2.1	88.9
	Often	9	.8	.8	89.7
	NA-LEGIT SKIP	126	10.3	10.3	99.9
	Refused	1	.1	.1	100.0
	Total	1227	100.0	100.0	

More money for excitement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	1067	87.0	87.0	87.0
	Once or twice	16	1.3	1.3	88.3
	Sometimes	11	.9	.9	89.2
	Often	5	.4	.4	89.6
	NA-LEGIT SKIP	126	10.3	10.3	99.9
	DK	1	.1	.1	99.9
	Refused	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Restless when trying quit gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	1078	87.8	87.8	87.8
	Once or twice	9	.8	.8	88.6
	Sometimes	8	.6	.6	89.2
	Often	4	.3	.3	89.5
	NA-LEGIT SKIP	126	10.3	10.3	99.8
	DK	1	.1	.1	99.9
	Refused	2	.1	.1	100.0
	Total	1227	100.0	100.0	

Gambled to escape problems

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	1056	86.0	86.0	86.0
	Once or twice	27	2.2	2.2	88.2
	Sometimes	12	.9	.9	89.2
	Often	6	.5	.5	89.7
	NA-LEGIT SKIP	126	10.3	10.3	99.9
	Refused	.1	.1	.1	100.0
	Total	1227	100.0	100.0	

Returned to recoup gambling losses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	1020	83.2	83.2	83.2
	Once or twice	46	3.7	3.7	86.9
	Sometimes	25	2.1	2.1	89.0
	Often	9	.7	.7	89.7
	NA-LEGIT SKIP	126	10.3	10.3	99.9
	Refused	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Lied to hide gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	1089	88.8	88.8	88.8
	Once or twice	3	.2	.2	89.0
	Sometimes	4	.3	.3	89.3
	Often	4	.3	.3	89.7
	NA-LEGIT SKIP	126	10.3	10.3	99.9
	Refused	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Repeated unsuccessfully to quit gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	1069	87.1	87.1	87.1
	Once or twice	10	.8	.8	87.9
	Sometimes	9	.8	.8	88.7
	Often	10	.8	.8	89.5
	NA-LEGIT SKIP	126	10.3	10.3	99.8
	Refused	3	.2	.2	100.0
	Total	1227	100.0	100.0	

Illegal to pay gambling debts

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	1097	89.4	89.4	89.4
	Once or twice	1	.1	.1	89.5
	Sometimes	1	.1	.1	89.6
	Often	1	.1	.1	89.7
	NA-LEGIT SKIP	126	10.3	10.3	99.9
	Refused	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Risked opportunity because of gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	1095	89.2	89.2	89.2
	Once or twice	3	.2	.2	89.4
	Sometimes	1	.1	.1	89.5
	Often	1	.1	.1	89.6
	NA-LEGIT SKIP	126	10.3	10.3	99.9
	Refused	2	.1	.1	100.0
	Total	1227	100.0	100.0	

Sought help for gambling finances

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	1091	88.9	88.9	88.9
	Once or twice	4	.4	.4	89.2
	Sometimes	3	.3	.3	89.5
	Often	1	.1	.1	89.6
	NA-LEGIT SKIP	126	10.3	10.3	99.9
	Refused	2	.1	.1	100.0
	Total	1227	100.0	100.0	

Weighted Household Survey - History Questions

Feel your parents have a gambling problem?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Parent with problem	78	6.3	6.3	6.3
	No problem	1145	93.3	93.3	99.6
	DK	4	.3	.3	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Parent with a gambling problem-1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Father	45	3.7	3.7	3.7
	Mother	23	1.8	1.8	5.5
	Stepfather	5	.4	.4	5.9
	Stepmother	4	.3	.3	6.2
	NA-LEGIT SKIP	1149	93.7	93.7	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Parent with a gambling problem-2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NA-NO OTHER P	66	5.4	5.4	5.4
	Father	1	.1	.1	5.4
	Mother	10	.8	.8	6.2
	NA-LEGIT SKIP	1150	93.8	93.8	100.0
	Total	1227	100.0	100.0	

Age when first gambled

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	.2	.2	.2
	5	3	.3	.3	.5
	6	5	.4	.4	.9
	7	2	.1	.1	1.0
	8	8	.6	.6	1.7
	9	9	.8	.8	2.4
	10	19	1.6	1.6	4.0
	11	2	.2	.2	4.1
	12	20	1.6	1.6	5.8
	13	11	.9	.9	6.7
	14	19	1.6	1.6	8.2
	15	35	2.9	2.9	11.1
	16	39	3.2	3.2	14.3
	17	32	2.6	2.6	16.9
	18	234	19.1	19.1	35.9
	19	41	3.3	3.3	39.2
	20	70	5.7	5.7	45.0
	21	90	7.3	7.3	52.3

Age when first gambled

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	22	28	2.3	2.3	54.5
	23	26	2.1	2.1	56.6
	24	12	.9	.9	57.6
	25	80	6.5	6.5	64.1
	26	9	.7	.7	64.8
	27	10	.8	.8	65.6
	28	8	.7	.7	66.3
	29	8	.6	.6	66.9
	30	51	4.1	4.1	71.0
	31	3	.2	.2	71.3
	32	2	.2	.2	71.5
	33	3	.2	.2	71.7
	34	3	.3	.3	72.0
	35	31	2.5	2.5	74.5
	36	3	.3	.3	74.8
	37	2	.1	.1	74.9
	38	1	.1	.1	75.0
	40	34	2.8	2.8	77.8
	42	3	.2	.2	78.0
	44	2	.2	.2	78.2
	45	17	1.4	1.4	79.6
	46	3	.2	.2	79.8
	47	2	.1	.1	80.0
	49	2	.1	.1	80.1
	50	27	2.2	2.2	82.3
	52	1	.1	.1	82.4
	53	1	.1	.1	82.5
	54	1	.1	.1	82.5
	55	4	.3	.3	82.9
	56	2	.2	.2	83.0
	58	2	.2	.2	83.2
	60	10	.8	.8	84.0
	62	2	.1	.1	84.2
	64	1	.1	.1	84.2
	65	5	.4	.4	84.6
	68	1	.1	.1	84.8
	69	1	.1	.1	84.8
	70	3	.3	.3	85.1
	72	1	.1	.1	85.2
	74	1	.1	.1	85.2
	75	1	.1	.1	85.3
	78	1	.1	.1	85.4
	82	1	.1	.1	85.4
	85	1	.1	.1	85.5
	NA-LEGIT SKIP	126	10.3	10.3	95.8
	DK	44	3.6	3.6	99.3
	REFUSED	8	.7	.7	100.0
	Total	1227	100.0	100.0	

Game played when first gambled

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Instant lottery	76	6.2	6.2	6.2
	Other lottery	50	4.1	4.1	10.3
	Live bingo	41	3.3	3.3	13.6
	Live Keno	24	2.0	2.0	15.6
	Charitable	63	5.1	5.1	20.7
	Instate machines	272	22.2	22.2	42.9
	MT casino cards	12	1.0	1.0	43.8
	Outstate machines	165	13.5	13.5	57.3
	Table games outstate	15	1.2	1.2	58.5
	High stakes card games	2	.2	.2	58.7
	Sports pools	43	3.5	3.5	62.2
	Sporting events	56	4.6	4.6	66.8
	Horse racing	52	4.3	4.3	71.0
	Games of skill	16	1.3	1.3	72.3
	Other gambling	34	2.8	2.8	75.1
	Small stakes cards	147	11.9	11.9	87.0
	NA-LEGIT SKIP	126	10.3	10.3	97.3
	DK	26	2.1	2.1	99.4
	REFUSED	7	.6	.6	100.0
	Total	1227	100.0	100.0	

Any time gambling made you nervous?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Nervous	109	8.8	8.8	8.8
	Not nervous	989	80.6	80.6	89.5
	NA-LEGIT SKIP	126	10.3	10.3	99.7
	DK	1	.1	.1	99.8
	REFUSED	2	.2	.2	100.0
	Total	1227	100.0	100.0	

Age when nervous

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	8	.2	.2	.2
	9	.1	.1	.3
	13	.1	.1	.3
	14	.3	.2	.6
	15	.2	.2	.7
	17	.6	.5	1.3
	18	12	1.0	2.2
	19	8	.6	2.9
	20	13	1.1	3.9
	21	11	.9	4.8
	22	1	.1	4.9
	23	6	.5	5.4
	25	8	.7	6.1
	26	1	.1	6.1
	27	1	.1	6.2
	28	1	.1	6.3
	29	1	.1	6.4
	30	6	.5	6.9
	32	1	.1	7.0
	33	1	.1	7.1
	34	1	.1	7.1
	35	1	.1	7.2
	39	1	.1	7.3
	40	7	.6	7.9
	42	2	.2	8.0
	44	1	.1	8.1
	46	1	.1	8.2
	50	2	.2	8.4
	53	1	.1	8.4
	56	1	.1	8.5
	60	1	.1	8.6
	62	1	.1	8.6
	72	1	.1	8.7
	NA-LEGIT SKIP	1118	91.2	99.9
	DK	1	.1	99.9
	REFUSED	1	.1	100.0
	Total	1227	100.0	

Game that made you nervous

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	.1	.1	.1
	2	1	.1	.1	.2
	3	5	.4	.4	.6
	4	4	.4	.4	.9
	6	26	2.2	2.2	3.1
	8	23	1.9	1.9	4.9
	9	9	.8	.8	5.7
	10	3	.3	.3	6.0
	11	1	.1	.1	6.0
	12	5	.4	.4	6.4
	13	4	.3	.3	6.7
	14	4	.3	.3	7.0
	16	1	.1	.1	7.2
	17	20	1.6	1.6	8.8
	NA-LEGIT SKIP	1118	91.2	91.2	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Ever desired to quit gambling?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Desired help	17	1.4	1.4	1.4
	No help	1080	88.0	88.0	89.4
	NA-LEGIT SKIP	126	10.3	10.3	99.7
	REFUSED	4	.3	.3	100.0
	Total	1227	100.0	100.0	

Ever sought help to quit gambling?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sought help	8	.6	.6	.6
	No help	1088	88.7	88.7	89.3
	NA-LEGIT SKIP	126	10.3	10.3	99.6
	REFUSED	5	.4	.4	100.0
	Total	1227	100.0	100.0	

Gambling help sought-1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Family member	1	.1	.1	.1
	GA	3	.2	.2	.3
	Other counselor	1	.1	.1	.4
	Religious leader	1	.1	.1	.5
	12-step program	2	.2	.2	.6
	NA-LEGIT SKIP	1219	99.4	99.4	100.0
	Total	1227	100.0	100.0	

Gambling help sought-2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No additional choices	2	.2	.2	.2
	Family member	1	.1	.1	.3
	Friend	2	.2	.2	.4
	GA	1	.1	.1	.5
	12-step program	1	.1	.1	.6
	NA-LEGIT SKIP	1219	99.4	99.4	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Gambling help sought-3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No additional choices	5	.4	.4	.4
	GA	1	.1	.1	.5
	Other	1	.1	.1	.6
	NA-LEGIT SKIP	1219	99.4	99.4	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Time in gambling treatment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	8	.6	.6	.6
	97	1219	99.4	99.4	100.0
	Total	1227	100.0	100.0	

Number of counseling sessions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	7	.6	.6	.6
	20	1	.1	.1	.6
	97	1219	99.4	99.4	100.0
	Total	1227	100.0	100.0	

Ever sought help for other problems?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sought help	107	8.7	8.7	8.7
	No help	1115	90.9	90.9	99.6
	REFUSED	4	.4	.4	100.0
	Total	1227	100.0	100.0	

Other help sought-1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Family doctor	29	2.3	2.3	2.3
	Instate treatment	6	.5	.5	2.8
	Outstate treatment	4	.3	.3	3.2
	VA	3	.3	.3	3.4
	Therapist	26	2.1	2.1	5.5
	Other counselor	17	1.4	1.4	6.9
	Religious leader	2	.1	.1	7.0
	Instate hospital	3	.2	.2	7.3
	Outstate hospital	1	.1	.1	7.3
	12-step program	15	1.2	1.2	8.6
	Other	1	.1	.1	8.7
	NA-LEGIT SKIP	1120	91.3	91.3	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Other help sought-2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No additional choices	70	5.7	5.7	5.7
	Family member	10	.8	.8	6.5
	Friend	2	.2	.2	6.7
	Family doctor	4	.4	.4	7.0
	Instate treatment	3	.3	.3	7.3
	Outstate treatment	2	.2	.2	7.4
	Therapist	12	.9	.9	8.4
	Other counselor	1	.1	.1	8.5
	12-step program	3	.2	.2	8.7
	NA-LEGIT SKIP	1120	91.3	91.3	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Other help sought-3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No additional choices	89	7.3	7.3	7.3
	Family member	6	.5	.5	7.8
	Therapist	5	.4	.4	8.2
	Other counselor	5	.4	.4	8.5
	Instate hospital	1	.1	.1	8.6
	Other	1	.1	.1	8.7
	NA-LEGIT SKIP	1120	91.3	91.3	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Time in other help treatment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	92	7.5	7.5	7.5
	1	2	.1	.1	7.6
	6	1	.1	.1	7.7
	14	1	.1	.1	7.8
	18	1	.1	.1	7.8
	21	1	.1	.1	7.9
	28	1	.1	.1	8.0
	30	3	.2	.2	8.2
	31	1	.0	.0	8.3
	32	1	.1	.1	8.3
	35	1	.1	.1	8.4
	45	1	.1	.1	8.5
	60	2	.2	.2	8.7
	97	1120	91.3	91.3	99.9
	99	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Number of other counseling sessions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	31	2.5	2.5	2.5
	1	5	.4	.4	2.9
	2	5	.4	.4	3.4
	3	4	.3	.3	3.7
	4	3	.2	.2	3.9
	5	7	.5	.5	4.4
	6	3	.2	.2	4.7
	7	2	.1	.1	4.8
	8	1	.1	.1	4.9
	9	1	.1	.1	5.0
	10	8	.6	.6	5.6
	12	3	.3	.3	5.9
	14	1	.1	.1	6.0
	15	3	.2	.2	6.2
	20	7	.6	.6	6.8
	24	3	.3	.3	7.1
	25	1	.1	.1	7.2
	30	5	.4	.4	7.5
	34	1	.1	.1	7.6
	40	1	.0	.0	7.7
	48	2	.2	.2	7.9
	50	3	.3	.3	8.1
	52	1	.1	.1	8.2
	60	1	.1	.1	8.3
	64	2	.2	.2	8.4
	80	1	.1	.1	8.5
	97	1120	91.3	91.3	99.8
	99	2	.1	.1	99.9
	999	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Ever been in bankruptcy court?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MISSING	38	3.1	3.1	3.1
	R debtor	52	4.3	4.3	7.4
	No bankruptcy court	1128	91.9	91.9	99.3
	R creditor	5	.4	.4	99.7
	DK	2	.1	.1	99.8
	REFUSED	2	.2	.2	100.0
	Total	1227	100.0	100.0	

Amount of school or work missed

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1217	99.2	99.2	99.2
	1	7	.6	.6	99.8
	12	1	.1	.1	99.8
	14	1	.1	.1	99.9
	99	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Committed illegal activity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NA-LEGIT SKIP	1224	99.8	99.8	99.8
	MISSING	3	.2	.2	100.0
	Total	1227	100.0	100.0	

Arrested for illegal activity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NA-LEGIT SKIP	1227	100.0	100.0	100.0

Domestic violence with arguments

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Violence	1	.1	.1	.1
	No violence	5	.4	.4	.5
	NA-LEGIT SKIP	1221	99.5	99.5	100.0
	Total	1227	100.0	100.0	

Way paid for gambling treatment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None required	8	.6	.6	.6
	NA-LEGIT SKIP	1219	99.4	99.4	100.0
	Total	1227	100.0	100.0	

Way paid for gambling counseling sessions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None required	7	.6	.6	.6
	Other	1	.1	.1	.6
	NA-LEGIT SKIP	1219	99.4	99.4	100.0
	Total	1227	100.0	100.0	

Way paid for other treatment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None required	86	7.0	7.0	7.0
	Medicare	1	.1	.1	7.1
	Medicaid	2	.2	.2	7.3
	Private insurance	7	.6	.6	7.8
	Self pay	6	.5	.5	8.4
	Other	2	.2	.2	8.5
	VA	2	.2	.2	8.7
	NA-LEGIT SKIP	1120	91.3	91.3	99.9
	DK	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Way paid for other counseling sessions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None required	11	.9	.9	.9
	Medicaid	2	.2	.2	1.1
	Private insurance	46	3.7	3.7	4.8
	Self pay	35	2.8	2.8	7.7
	Other	7	.6	.6	8.3
	VA	2	.2	.2	8.4
	NA-LEGIT SKIP	1120	91.3	91.3	99.7
	DK	3	.2	.2	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Money owed as a result of gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	1069	87.2	87.2	87.2
	1	3	.2	.2	87.4
	9	1	.0	.0	87.4
	10	2	.1	.1	87.6
	20	6	.5	.5	88.1
	60	2	.2	.2	88.2
	100	3	.2	.2	88.4
	200	3	.2	.2	88.7
	1000	1	.1	.1	88.8
	2000	1	.1	.1	88.8
	3000	1	.1	.1	88.9
	5000	1	.1	.1	89.0
	14464	1	.1	.1	89.1
	16959	5	.4	.4	89.5
	30000	1	.1	.1	89.6
	40000	1	.1	.1	89.6
	NA-LEGIT SKIP	126	10.3	10.3	99.9
	REFUSED	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Weighted Household Survey - Demographics

Household income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than \$10,000	205	16.7	16.7	16.7
	\$10,000-14,999	76	6.2	6.2	23.0
	\$15,000-19,999	91	7.4	7.4	30.4
	\$20,000-34,999	290	23.6	23.7	54.0
	\$35,000-49,999	238	19.4	19.5	73.5
	\$50,000-99,999	256	20.9	20.9	94.4
	More than \$100,000	68	5.6	5.6	100.0
	Total	1225	99.8	100.0	
Missing	REFUSED	2	.2		
Total		1227	100.0		

Social security income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Part of HH income	319	26.0	26.0	26.0
	Not part of HH income	908	74.0	74.0	100.0
	Total	1227	100.0	100.0	

Unemployment Compensation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Part of HH income	82	6.7	6.7	6.7
	Not part of HH income	1145	93.3	93.3	100.0
	Total	1227	100.0	100.0	

Veterans payments

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Part of HH income	57	4.6	4.6	4.6
	Not part of HH income	1170	95.4	95.4	100.0
	Total	1227	100.0	100.0	

Other public assistance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Part of HH income	66	5.3	5.3	5.3
	Not part of HH income	1161	94.7	94.7	100.0
	Total	1227	100.0	100.0	

Gender of respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	604	49.2	49.2	49.2
	Female	623	50.8	50.8	100.0
	Total	1227	100.0	100.0	

Marital status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	710	57.8	58.0	58.0
	Widowed	110	9.0	9.0	67.0
	Divorced	157	12.8	12.9	79.8
	Separated	12	1.0	1.0	80.8
	Never married	235	19.1	19.2	100.0
	Total	1224	99.8	100.0	
Missing	REFUSED	3	.2		
Total		1227	100.0		

Employment status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Full-time	623	50.8	50.8	50.8
	Part-time	173	14.1	14.1	64.9
	Unemployed	21	1.7	1.7	66.6
	Student	53	4.3	4.3	70.9
	Keeping house	108	8.8	8.8	79.7
	Disabled	22	1.8	1.8	81.5
	Retired	207	16.9	16.9	98.4
	Other	15	1.2	1.2	99.6
	REFUSED	5	.4	.4	100.0
	Total	1227	100.0	100.0	

Religion

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	133	10.8	10.8	10.8
	Protestant	600	48.9	48.9	59.7
	Catholic	276	22.5	22.5	82.2
	Jewish	6	.5	.5	82.7
	Muslim	47	3.8	3.8	86.5
	LDS	18	1.4	1.4	88.0
	Other	60	4.9	4.9	92.8
	BORN-AGAIN CHRISTIAN	71	5.8	5.8	98.6
	NATIVE AMERICAN CHURCH	5	.4	.4	99.1
	REFUSED	12	.9	.9	100.0
	Total	1227	100.0	100.0	

Race of respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	White	1135	92.5	92.5	92.5
	American Indian	81	6.6	6.6	99.1
	Asian & PI	6	.5	.5	99.6
	Black	1	.1	.1	99.7
	Other	4	.3	.3	100.0
	Total	1227	100.0	100.0	

Educational attainment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than HS	113	9.2	9.2	9.2
	HS diploma	414	33.8	33.8	43.0
	Some post HS	386	31.5	31.5	74.5
	Bachelor degree	227	18.5	18.5	93.0
	Master degree	55	4.5	4.5	97.5
	Doctorate	11	.9	.9	98.4
	Professional	16	1.3	1.3	99.7
	REFUSED	3	.3	.3	100.0
	Total	1227	100.0	100.0	

Age of respondent (unimputed data)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 to 24 Years	163	13.3	13.3	13.3
	25 to 34 Years	193	15.7	15.7	29.0
	35 to 44 Years	275	22.4	22.4	51.4
	45 to 64 Years	364	29.6	29.6	81.1
	65 Years and Over	216	17.6	17.6	98.7
	NR	16	1.3	1.3	100.0
	Total	1227	100.0	100.0	

1998 Household Survey Lifetime Prevalence (Weighted)

Lifetime prevalence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	917	74.7	74.7	74.7
	1.00	184	15.0	15.0	89.7
	2.00	57	4.6	4.6	94.3
	3.00	27	2.2	2.2	96.5
	4.00	8	.7	.7	97.2
	5.00	14	1.1	1.1	98.3
	6.00	6	.5	.5	98.8
	7.00	4	.3	.3	99.1
	8.00	1	.1	.1	99.2
	9.00	1	.1	.1	99.3
	10.00	1	.1	.1	99.4
	11.00	1	.1	.1	99.4
	12.00	1	.1	.1	99.5
	14.00	1	.1	.1	99.6
	15.00	2	.2	.2	99.8
	17.00	2	.2	.2	99.9
	19.00	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Lifetime problem gambler

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No problem	1157	94.3	94.3	94.3
	Problem	70	5.7	5.7	100.0
	Total	1227	100.0	100.0	

Descriptives

			Statistic	Std. Error
Lifetime problem gambler	Mean		5.71E-02	6.63E-03
	95% Confidence Interval for Mean	Lower Bound	4.41E-02	
		Upper Bound	7.01E-02	
	5% Trimmed Mean		7.90E-03	
	Median		.00	
	Variance		5.390E-02	
	Std. Deviation		.23	
	Minimum		0	
	Maximum		1	
	Range		1	
	Interquartile Range		.00	
	Skewness		3.822	.070
	Kurtosis		12.626	.140

Lifetime pathological gambler flag

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1192	97.2	97.2	97.2
	1	35	2.8	2.8	100.0
	Total	1227	100.0	100.0	

Descriptives

			Statistic	Std. Error
Lifetime pathological gambler flag	Mean		2.84E-02	4.74E-03
	95% Confidence Interval for Mean	Lower Bound	1.91E-02	
		Upper Bound	3.77E-02	
	5% Trimmed Mean		.00	
	Median		.00	
	Variance		2.759E-02	
	Std. Deviation		.17	
	Minimum		0	
	Maximum		1	
	Range		1	
	Interquartile Range		.00	
	Skewness		5.688	.070
	Kurtosis		30.400	.140

**1998 Household Survey
Past Year Prevalance Rates-SOGS (Weighted)**

Current prevalence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	1034	84.3	84.3	84.3
	1.00	117	9.5	9.5	93.8
	2.00	32	2.6	2.6	96.4
	3.00	19	1.6	1.6	98.0
	4.00	5	.4	.4	98.4
	5.00	10	.8	.8	99.2
	6.00	3	.2	.2	99.5
	7.00	1	.1	.1	99.5
	8.00	1	.1	.1	99.6
	9.00	1	.1	.1	99.7
	15.00	2	.2	.2	99.8
	16.00	1	.1	.1	99.9
	18.00	1	.1	.1	100.0
	Total	1227	100.0	100.0	

Current problem gambler flag

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No problem	1183	96.4	96.4	96.4
	Gambling problem	44	3.6	3.6	100.0
	Total	1227	100.0	100.0	

Descriptives

			Statistic	Std. Error
Current problem gambler flag	Mean		3.58E-02	5.30E-03
	95% Confidence Interval for Mean	Lower Bound	2.54E-02	
		Upper Bound	4.62E-02	
	5% Trimmed Mean		.00	
	Median		.00	
	Variance		3.451E-02	
	Std. Deviation		.19	
	Minimum		0	
	Maximum		1	
	Range		1	
	Interquartile Range		.00	
	Skewness		5.006	.070
	Kurtosis		23.096	.140

Current pathological flag

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1208	98.4	98.4	98.4
	1	19	1.6	1.6	100.0
	Total	1227	100.0	100.0	

Descriptives

			Statistic	Std. Error
Current pathological flag	Mean		1.59E-02	3.57E-03
	95% Confidence Interval for Mean	Lower Bound	8.86E-03	
		Upper Bound	2.29E-02	
	5% Trimmed Mean		.00	
	Median		.00	
	Variance		1.562E-02	
	Std. Deviation		.12	
	Minimum		0	
	Maximum		1	
	Range		1	
	Interquartile Range		.00	
	Skewness		7.761	.070
	Kurtosis		58.328	.140

Frequencies

Statistics

Age Impute Flag

N	Valid	1227
	Missing	0

Age Impute Flag

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	1211	98.7	98.7	98.7
	Yes	16	1.3	1.3	100.0
	Total	1227	100.0	100.0	

Appendix J

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Gambling Establishment Survey Frequencies

Montana Gambling Firm Characteristics-Unweighted

Establishment rent VLT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	333	77.6	77.6	77.6
	2	96	22.4	22.4	100.0
	Total	429	100.0	100.0	

Number of rental VLT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	14	3.3	4.2	4.2
	2	30	7.0	9.0	13.2
	3	30	7.0	9.0	22.2
	4	34	7.9	10.2	32.4
	5	30	7.0	9.0	41.4
	6	21	4.9	6.3	47.7
	7	20	4.7	6.0	53.8
	8	25	5.8	7.5	61.3
	9	11	2.6	3.3	64.6
	10	10	2.3	3.0	67.6
	11	5	1.2	1.5	69.1
	12	15	3.5	4.5	73.6
	13	5	1.2	1.5	75.1
	14	9	2.1	2.7	77.8
	15	6	1.4	1.8	79.6
	16	5	1.2	1.5	81.1
	17	3	.7	.9	82.0
	18	2	.5	.6	82.6
	19	2	.5	.6	83.2
	20	56	13.1	16.8	100.0
	Total	333	77.6	100.0	
Missing	97	96	22.4		
Total		429	100.0		

Establishment own VLT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	136	31.7	31.7	31.7
	2	293	68.3	68.3	100.0
	Total	429	100.0	100.0	

Number of owned VLT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	1.4	4.4	4.4
	2	10	2.3	7.4	11.9
	3	8	1.9	5.9	17.8
	4	10	2.3	7.4	25.2
	5	5	1.2	3.7	28.9
	6	12	2.8	8.9	37.8
	7	6	1.4	4.4	42.2
	8	4	.9	3.0	45.2
	9	4	.9	3.0	48.1
	10	6	1.4	4.4	52.6
	11	3	.7	2.2	54.8
	12	7	1.6	5.2	60.0
	13	2	.5	1.5	61.5
	14	3	.7	2.2	63.7
	15	1	.2	.7	64.4
	16	5	1.2	3.7	68.1
	17	3	.7	2.2	70.4
	18	7	1.6	5.2	75.6
	19	1	.2	.7	76.3
	20	32	7.5	23.7	100.0
	Total	135	31.5	100.0	
Missing	97	294	68.5		
Total		429	100.0		

Time in business

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	6	1.4	1.4	1.4
	1	17	4.0	4.0	5.4
	2	35	8.2	8.2	13.5
	3	35	8.2	8.2	21.7
	4	67	15.6	15.6	37.3
	5	50	11.7	11.7	49.0
	6	219	51.0	51.0	100.0
	Total	429	100.0	100.0	

Time gambling provided

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	27	4.9	4.9	4.9
	1	30	7.0	7.0	11.9
	2	40	9.3	9.3	21.2
	3	36	8.4	8.4	29.6
	4	105	24.5	24.5	54.1
	5	110	25.6	25.6	79.7
	6	86	20.0	20.0	99.8
	7	1	.2	.2	100.0
	Total	429	100.0	100.0	

Tax status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		81	18.9	18.9	18.9
	Not-for-profit	39	9.1	9.1	28.0
	For profit	309	72.0	72.0	100.0
	Total	429	100.0	100.0	

Planned expansion

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	65	15.2	17.2	17.2
	No	314	73.2	82.8	100.0
	Total	379	88.3	100.0	
Missing	System	50	11.7		
Total		429	100.0		

Establishment have outstanding debt

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	232	54.1	54.1	54.1
	No	197	45.9	45.9	100.0
	Total	429	100.0	100.0	

Is establishment owned by another company

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	14	3.3	4.2	4.2
	No	317	73.9	95.8	100.0
	Total	331	77.2	100.0	
Missing	System	98	22.8		
Total		429	100.0		

Is liquor license owned by another person

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	10	2.3	2.6	2.6
	No	372	86.7	97.4	100.0
	Total	382	89.0	100.0	
Missing	System	47	11.0		
Total		429	100.0		

Is real estate owned by someone else

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	114	26.6	31.2	31.2
	No	251	58.5	68.8	100.0
	Total	365	85.1	100.0	
Missing	System	64	14.9		
Total		429	100.0		

Mean Receipts by Establishment size-Weighted data

Size of gambling operation = No machines

Descriptive Statistics^a

	N	Minimum	Maximum	Mean	Std. Deviation
Receipts except VLT	45	533.00	225000.00	41456.667	83103.8177
Receipts-amusement machine	45	.00	.00	.0000	.0000
Receipts-memberships	45	.00	7454.00	1380.6667	2755.4315
Sales of food	45	.00	150000.00	26204.000	56016.4734
Sales of alcoholic beverages	45	.00	75000.00	12875.500	28112.7656
Sales of fuel	45	.00	.00	.0000	.0000
Sales of other merchandise	45	.00	5000.00	843.3333	1880.2938
Other operating revenue	45	.00	469.00	153.1667	219.1562
Receipts-net VLT	89	.00	8542.00	1503.4167	2607.8905
Valid N (listwise)	45				

a. Size of gambling operation = No machines

Size of gambling operation = 1- 5 machines

Descriptive Statistics^a

	N	Minimum	Maximum	Mean	Std. Deviation
Receipts except VLT	334	75.00	4210341.0	387072.32	666919.322
Receipts-amusement machine	334	.00	23694.00	1249.8183	3665.7818
Receipts-memberships	334	.00	134400.00	4959.3074	22209.3806
Sales of food	334	.00	925197.00	154191.25	205424.454
Sales of alcoholic beverages	334	.00	308943.00	67664.212	59724.8285
Sales of fuel	334	.00	3536086.0	88933.850	466823.770
Sales of other merchandise	334	.00	469378.00	19311.276	77113.1870
Other operating revenue	334	.00	1426625.0	50762.605	215297.260
Receipts-net VLT	313	200.00	149315.00	15528.658	23508.1676
Valid N (listwise)	292				

a. Size of gambling operation = 1- 5 machines

Size of gambling operation = 6-10 machines

Descriptive Statistics^a

	N	Minimum	Maximum	Mean	Std. Deviation
Receipts except VLT	364	365.00	7275148.0	429955.79	979946.402
Receipts-amusement machine	364	.00	30809.00	1230.9937	3849.8263
Receipts-memberships	364	.00	19600.00	934.4159	3367.8426
Sales of food	364	.00	1025985.0	121303.17	223050.996
Sales of alcoholic beverages	364	.00	6247465.0	208224.95	751652.861
Sales of fuel	364	.00	1283874.0	28042.594	185764.924
Sales of other merchandise	364	.00	1012000.0	54696.122	200314.543
Other operating revenue	364	.00	200000.00	15523.540	48770.0326
Receipts-net VLT	328	870.00	756455.00	55974.436	96287.1988
Valid N (listwise)	328				

a. Size of gambling operation = 6-10 machines

Size of gambling operation = 11-19 machines

Descriptive Statistics^a

	N	Minimum	Maximum	Mean	Std. Deviation
Receipts except VLT	278	200.00	1970450.0	325089.98	343933.494
Receipts-amusement machine	278	.00	8699.00	1688.1810	2592.5990
Receipts-memberships	278	.00	17500.00	557.1748	1983.4507
Sales of food	278	.00	999997.00	139766.01	228801.947
Sales of alcoholic beverages	278	.00	371116.00	129568.89	87419.2547
Sales of fuel	278	.00	1200000.0	25081.090	171830.909
Sales of other merchandise	278	.00	136063.00	6925.6879	22685.2288
Other operating revenue	278	.00	695576.00	21502.950	82227.9661
Receipts-net VLT	250	764.00	459625.00	120877.12	106842.255
Valid N (listwise)	245				

a. Size of gambling operation = 11-19 machines

Size of gambling operation = 20 machines

Descriptive Statistics^a

	N	Minimum	Maximum	Mean	Std. Deviation
Receipts except VLT	283	995.00	8116742.0	921910.19	1485529.09
Receipts-amusement machine	283	.00	56726.00	2770.5890	7575.4351
Receipts-memberships	283	.00	4067.00	379.0137	887.9174
Sales of food	283	.00	1270439.0	236934.81	291399.373
Sales of alcoholic beverages	283	.00	491259.00	120692.85	101495.070
Sales of fuel	283	.00	7065179.0	512801.74	1252296.39
Sales of other merchandise	283	.00	193020.00	25249.863	43468.9221
Other operating revenue	283	.00	631144.00	23081.329	91556.0902
Receipts-net VLT	271	31902.00	1194660.0	474475.84	250072.011
Valid N (listwise)	267				

a. Size of gambling operation = 20 machines

Legal form of organization

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sole proprietorship	355	31.9	32.1	32.1
	Partnership	63	3.6	3.7	35.7
	LLP	41	2.3	2.4	38.1
	Government	17	1.0	1.0	39.1
	Corporation	940	54.0	54.4	93.5
	Other	113	6.5	6.5	100.0
	Total	1729	99.4	100.0	
Missing	System	11	.6		
Total		1740	100.0		

Size of gambling operation * Legal form of organization Crosstabulation

			Legal form of organization				Total
			Sole proprietorship	Partnership	Corporation	Other	
Size of gambling operation	No machines	Count	38		25	27	84
		% within Size of gambling operation	45.2%		29.8%	25.0%	100.0%
	1- 5 machines	Count	206	35	237	36	514
		% within Size of gambling operation	40.1%	6.8%	46.1%	7.0%	100.0%
	6-10 machines	Count	167	34	211	46	458
		% within Size of gambling operation	36.5%	7.4%	46.1%	10.0%	100.0%
	11-19 machines	Count	90	10	188	20	308
		% within Size of gambling operation	29.2%	3.2%	61.0%	6.5%	100.0%
	20 machines	Count	38	17	175	3	233
		% within Size of gambling operation	16.3%	7.3%	75.1%	1.3%	100.0%
	Convenience store	Count	16	8	103	3	130
		% within Size of gambling operation	12.3%	6.2%	79.2%	2.3%	100.0%
Total		Count	555	104	939	129	1727
		% within Size of gambling operation	32.1%	6.0%	54.4%	7.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	176.834 ^a	15	.000
Continuity Correction			
Likelihood Ratio	183.207	15	.000
Linear-by-Linear Association	53.628	1	.000
N of Valid Cases	1727		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.06.

Size of gambling operation * Time in business Crosstabulation

			Time in business			Total
			Less than 5 yrs	5-15 yrs	15+ yrs	
Size of gambling operation	No machines	Count	17	8	59	84
		% within Size of gambling operation	20.2%	9.5%	70.2%	100.0%
	1- 5 machines	Count	81	165	272	518
		% within Size of gambling operation	15.6%	31.9%	52.5%	100.0%
	6-10 machines	Count	95	95	261	451
		% within Size of gambling operation	21.1%	21.1%	57.9%	100.0%
	11-19 machines	Count	39	108	157	304
		% within Size of gambling operation	12.8%	35.5%	51.6%	100.0%
	20 machines	Count	62	96	72	230
		% within Size of gambling operation	27.0%	41.7%	31.3%	100.0%
	Convenience store	Count	37	15	71	123
		% within Size of gambling operation	30.1%	12.2%	57.7%	100.0%
Total		Count	331	487	892	1710
		% within Size of gambling operation	19.4%	28.5%	52.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	105.626 ^a	10	.000
Continuity Correction			
Likelihood Ratio	113.044	10	.000
Linear-by-Linear Association	17.690	1	.000
N of Valid Cases	1710		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 16.26.

Size of gambling operation = No machines

Statistics^a

		Number of rental VLT	Number of owned VLT
N	Valid	85	85
	Missing	0	0
Mean		.00	.00
Std. Error of Mean		.00	.00

a. Size of gambling operation = No machines

Number of rental VLT^a

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	85	100.0	100.0

a. Size of gambling operation = No machines

Number of owned VLT^a

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	85	100.0	100.0

a. Size of gambling operation = No machines

Size of gambling operation = 1- 5 machines

Statistics^a

		Number of rental VLT	Number of owned VLT
N	Valid	518	518
	Missing	0	0
Mean		2.95	.54
Std. Error of Mean		7.37E-02	5.46E-02
Median		3.00	.00

a. Size of gambling operation = 1- 5 machines

Number of rental VLT^a

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	72	13.8	13.8	13.8
	1	40	7.7	7.7	21.6
	2	72	14.0	14.0	35.5
	3	111	21.5	21.5	57.0
	4	103	20.0	20.0	76.9
	5	120	23.1	23.1	100.0
	Total	518	100.0	100.0	

a. Size of gambling operation = 1- 5 machines

Number of owned VLT^a

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	422	81.4	81.4	81.4
	1	16	3.2	3.2	84.6
	2	20	3.8	3.8	88.4
	3	23	4.5	4.5	92.9
	4	31	5.9	5.9	98.8
	5	6	1.2	1.2	100.0
	Total	518	100.0	100.0	

a. Size of gambling operation = 1- 5 machines

Size of gambling operation = 6-10 machines

Statistics^a

		Number of rental VLT	Number of owned VLT
N	Valid	464	464
	Missing	0	0
Mean		6.06	1.62
Std. Error of Mean		.14	.14
Median		7.00	.00

a. Size of gambling operation = 6-10 machines

Number of rental VLT^a

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	39	12.8	12.8	12.8
	2	17	3.7	3.7	16.5
	3	24	5.2	5.2	21.7
	4	12	2.6	2.6	24.3
	5	5	1.1	1.1	25.3
	6	89	19.2	19.2	44.5
	7	95	20.5	20.5	65.0
	8	76	16.3	16.3	81.3
	9	40	8.6	8.6	89.9
	10	47	10.1	10.1	100.0
	Total	464	100.0	100.0	

a. Size of gambling operation = 6-10 machines

Number of owned VLT^a

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	336	72.5	72.5	72.5
	2	17	3.7	3.7	76.2
	3	14	3.0	3.0	79.2
	4	17	3.7	3.7	82.9
	5	5	1.1	1.1	84.0
	6	29	6.3	6.3	90.2
	7	12	2.6	2.6	92.8
	9	10	2.2	2.2	95.0
	10	23	5.0	5.0	100.0
	Total	464	100.0	100.0	

a. Size of gambling operation = 6-10 machines

Size of gambling operation = 11-19 machines

Statistics^a

		Number of rental VLT	Number of owned VLT
N	Valid	309	309
	Missing	0	0
Mean		9.87	4.53
Std. Error of Mean		.34	.33
Median		12.00	.00

a. Size of gambling operation = 11-19 machines

Number of rental VLT^a

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	52	16.8	16.8	16.8
	1	4	1.4	1.4	18.2
	2	6	1.9	1.9	20.1
	3	3	1.0	1.0	21.0
	4	11	3.6	3.6	24.6
	5	9	2.8	2.8	27.4
	6	12	3.8	3.8	31.2
	7	7	2.4	2.4	33.6
	8	10	3.3	3.3	36.9
	10	3	1.0	1.0	37.9
	11	32	10.5	10.5	48.4
	12	35	11.2	11.2	59.6
	13	21	6.9	6.9	66.5
	14	23	7.4	7.4	73.9
	15	15	4.9	4.9	78.8
	16	35	11.4	11.4	90.2
	17	12	3.8	3.8	93.9
	18	10	3.2	3.2	97.2
	19	9	2.8	2.8	100.0
	Total	309	100.0	100.0	

a. Size of gambling operation = 11-19 machines

Number of owned VLT^a

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	167	54.0	54.0	54.0
	1	4	1.2	1.2	55.1
	2	4	1.2	1.2	56.3
	3	4	1.2	1.2	57.5
	4	8	2.6	2.6	60.0
	5	3	1.0	1.0	61.0
	6	17	5.4	5.4	66.4
	7	15	5.0	5.0	71.4
	8	10	3.3	3.3	74.7
	9	3	1.0	1.0	75.7
	10	6	1.9	1.9	77.5
	11	16	5.3	5.3	82.8
	12	17	5.7	5.7	88.5
	13	4	1.4	1.4	89.9
	14	7	2.3	2.3	92.2
	16	9	2.8	2.8	95.1
	17	6	1.9	1.9	97.0
	18	9	3.0	3.0	100.0
	Total	309	100.0	100.0	

a. Size of gambling operation = 11-19 machines

Size of gambling operation = 20 machines

Statistics^a

		Number of rental VLT	Number of owned VLT
N	Valid	234	234
	Missing	0	0
Mean		9.13	10.87
Std. Error of Mean		.61	.61
Median		4.00	16.00

a. Size of gambling operation = 20 machines

Number of rental VLT^a

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	93	39.7	39.7	39.7
	1	3	1.5	1.5	41.2
	2	14	5.9	5.9	47.1
	3	3	1.5	1.5	48.5
	4	10	4.4	4.4	52.9
	6	3	1.5	1.5	54.4
	7	3	1.5	1.5	55.9
	10	3	1.5	1.5	57.4
	14	3	1.5	1.5	58.8
	20	96	41.2	41.2	100.0
	Total	234	100.0	100.0	

a. Size of gambling operation = 20 machines

Number of owned VLT^a

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	96	41.2	41.2	41.2
	6	3	1.5	1.5	42.6
	10	3	1.5	1.5	44.1
	13	3	1.5	1.5	45.6
	14	3	1.5	1.5	47.1
	16	10	4.4	4.4	51.5
	17	3	1.5	1.5	52.9
	18	14	5.9	5.9	58.8
	19	3	1.5	1.5	60.3
	20	93	39.7	39.7	100.0
	Total	234	100.0	100.0	

a. Size of gambling operation = 20 machines

Size of gambling operation = Convenience store

Statistics^a

		Number of rental VLT	Number of owned VLT
N	Valid	130	130
	Missing	0	0
Mean		12.10	1.46
Std. Error of Mean		.80	.33
Median		20.00	.00

a. Size of gambling operation = Convenience store

Number of rental VLT^a

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	28	21.2	21.2	21.2
	1	13	9.8	9.8	30.9
	5	6	4.8	4.8	35.8
	6	7	5.4	5.4	41.1
	10	4	3.4	3.4	44.5
	20	72	55.5	55.5	100.0
	Total	130	100.0	100.0	

a. Size of gambling operation = Convenience store

Number of owned VLT^a

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	102	78.7	78.7	78.7
	1	4	3.3	3.3	81.9
	3	4	3.4	3.4	85.3
	5	6	4.8	4.8	90.2
	6	7	5.4	5.4	95.5
	17	6	4.5	4.5	100.0
	Total	130	100.0	100.0	

a. Size of gambling operation = Convenience store

Employment Summary

Size of gambling operation = No machines

Descriptive Statistics^a

	N		Mean	
	Statistic	Std. Error	Statistic	Std. Error
Hours worked	17		30.4740	2.3889
Average hourly wage	17		6.3571	.1027
average annual salary	17		10055.9643	895.3196
N_BREAK	21		5.20	.80
Valid N (listwise)	17			

a. Size of gambling operation = No machines

Size of gambling operation = 1- 5 machines

Descriptive Statistics^a

	N		Mean	
	Statistic	Std. Error	Statistic	Std. Error
Hours worked	288		29.4442	.9970
Average hourly wage	264		6.4962	5.264E-02
average annual salary	258		8666.5654	214.9244
N_BREAK	294		6.50	.33
Valid N (listwise)	258			

a. Size of gambling operation = 1- 5 machines

Size of gambling operation = 6-10 machines

Descriptive Statistics^a

	N		Mean	
	Statistic	Std. Error	Statistic	Std. Error
Hours worked	341		26.7824	.3492
Average hourly wage	346		6.5299	3.197E-02
average annual salary	341		9122.9448	135.7194
N_BREAK	358		8.84	.72
Valid N (listwise)	341			

a. Size of gambling operation = 6-10 machines

Size of gambling operation = 11-19 machines

Descriptive Statistics^a

	N		Mean	
	Statistic	Std. Error	Statistic	Std. Error
Hours worked	262		30.4768	.4204
Average hourly wage	262		6.7380	4.337E-02
average annual salary	259		10260.5354	169.5887
N_BREAK	265		8.59	.39
Valid N (listwise)	259			

a. Size of gambling operation = 11-19 machines

Size of gambling operation = 20 machines

Descriptive Statistics^a

	N		Mean	
	Statistic	Std. Error	Statistic	Std. Error
Hours worked	189		30.4333	.3567
Average hourly wage	193		6.8232	5.804E-02
average annual salary	189		10672.5751	176.5566
N_BREAK	193		15.59	.85
Valid N (listwise)	189			

a. Size of gambling operation = 20 machines

Size of gambling operation = Convenience store

Descriptive Statistics^a

	N		Mean	
	Statistic	Std. Error	Statistic	Std. Error
Hours worked	124		30.5148	.5269
Average hourly wage	124		6.4113	3.158E-02
average annual salary	124		10009.2474	179.2179
N_BREAK	124		16.33	.89
Valid N (listwise)	124			

a. Size of gambling operation = Convenience store

Appendix K

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Gamblers Anonymous Survey Frequencies

GA Games Played

Instant lottery games

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	51	83.6	83.6	83.6
	Did not play	10	16.4	16.4	100.0
	Total	61	100.0	100.0	

Spent Instant lottery games

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	1.6	1.6	1.6
	2	1	1.6	1.6	3.3
	3	1	1.6	1.6	4.9
	5	9	14.8	14.8	19.7
	7	3	4.9	4.9	24.6
	10	5	8.2	8.2	32.8
	15	1	1.6	1.6	34.4
	20	11	18.0	18.0	52.5
	25	2	3.3	3.3	55.7
	30	5	8.2	8.2	63.9
	40	1	1.6	1.6	65.6
	50	3	4.9	4.9	70.5
	60	1	1.6	1.6	72.1
	80	2	3.3	3.3	75.4
	100	1	1.6	1.6	77.0
	240	1	1.6	1.6	78.7
	500	1	1.6	1.6	80.3
	NA-LEGIT SKIP	10	16.4	16.4	96.7
	MISSING	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

Instant lottery games past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	18	29.5	29.5	29.5
	Did not play	33	54.1	54.1	83.6
	NA-LEGIT SKIP	10	16.4	16.4	100.0
	Total	61	100.0	100.0	

Other lottery games

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	46	75.4	75.4	75.4
	Did not play	15	24.6	24.6	100.0
	Total	61	100.0	100.0	

Spent Other lottery games

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	1	1.6	1.6	1.6
	3	1	1.6	1.6	3.3
	4	1	1.6	1.6	4.9
	5	5	8.2	8.2	13.1
	7	3	4.9	4.9	18.0
	10	6	9.8	9.8	27.9
	15	1	1.6	1.6	29.5
	20	12	19.7	19.7	49.2
	24	1	1.6	1.6	50.8
	25	4	6.6	6.6	57.4
	35	1	1.6	1.6	59.0
	40	1	1.6	1.6	60.7
	50	3	4.9	4.9	65.6
	60	1	1.6	1.6	67.2
	100	1	1.6	1.6	68.9
	150	1	1.6	1.6	70.5
	160	1	1.6	1.6	72.1
	500	1	1.6	1.6	73.8
	NA-LEGIT SKIP	15	24.6	24.6	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Other lottery games past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	21	34.4	34.4	34.4
	Did not play	25	41.0	41.0	75.4
	NA-LEGIT SKIP	15	24.6	24.6	100.0
	Total	61	100.0	100.0	

Live bingo

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	38	62.3	62.3	62.3
	Did not play	23	37.7	37.7	100.0
	Total	61	100.0	100.0	

Spent Live bingo

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	6	9.8	9.8	9.8
	7	9	14.8	14.8	24.6
	10	2	3.3	3.3	27.9
	20	4	6.6	6.6	34.4
	25	4	6.6	6.6	41.0
	45	1	1.6	1.6	42.6
	60	2	3.3	3.3	45.9
	75	1	1.6	1.6	47.5
	80	1	1.6	1.6	49.2
	100	3	4.9	4.9	54.1
	150	1	1.6	1.6	55.7
	300	1	1.6	1.6	57.4
	600	1	1.6	1.6	59.0
	1000	1	1.6	1.6	60.7
	NA-LEGIT SKIP	23	37.7	37.7	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Live bingo past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	5	8.2	8.2	8.2
	Did not play	34	55.7	55.7	63.9
	NA-LEGIT SKIP	22	36.1	36.1	100.0
	Total	61	100.0	100.0	

Live Keno

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	47	77.0	77.0	77.0
	Did not play	14	23.0	23.0	100.0
	Total	61	100.0	100.0	

Spent Live Keno

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	8	13.1	13.1	13.1
	7	5	8.2	8.2	21.3
	10	6	9.8	9.8	31.1
	20	6	9.8	9.8	41.0
	25	4	6.6	6.6	47.5
	30	1	1.6	1.6	49.2
	40	2	3.3	3.3	52.5
	50	5	8.2	8.2	60.7
	100	2	3.3	3.3	63.9
	200	3	4.9	4.9	68.9
	250	1	1.6	1.6	70.5
	500	2	3.3	3.3	73.8
	800	1	1.6	1.6	75.4
	NA-LEGIT SKIP	14	23.0	23.0	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Live Keno past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	17	18.0	18.0	18.0
	Did not play	36	59.0	59.0	77.0
	NA-LEGIT SKIP	14	23.0	23.0	100.0
	Total	61	100.0	100.0	

Charitable games

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	50	82.0	82.0	82.0
	Did not play	11	18.0	18.0	100.0
	Total	61	100.0	100.0	

Spent Charitable games

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	3.3	3.3	3.3
	2	1	1.6	1.6	4.9
	5	17	27.9	27.9	32.8
	7	6	9.8	9.8	42.6
	10	8	13.1	13.1	55.7
	15	3	4.9	4.9	60.7
	20	5	8.2	8.2	68.9
	25	2	3.3	3.3	72.1
	40	1	1.6	1.6	73.8
	50	2	3.3	3.3	77.0
	300	1	1.6	1.6	78.7
	500	1	1.6	1.6	80.3
	NA-LEGIT SKIP	11	18.0	18.0	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Charitable games past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	15	24.6	24.6	24.6
	Did not play	35	57.4	57.4	82.0
	NA-LEGIT SKIP	11	18.0	18.0	100.0
	Total	61	100.0	100.0	

Gaming machine in Montana

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	57	93.4	93.4	93.4
	Did not play	4	6.6	6.6	100.0
	Total	61	100.0	100.0	

Spent Gaming machine in Montana

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	1	1.6	1.6	1.6
	7	4	6.6	6.6	8.2
	10	1	1.6	1.6	9.8
	50	1	1.6	1.6	11.5
	100	1	1.6	1.6	13.1
	150	1	1.6	1.6	14.8
	200	1	1.6	1.6	16.4
	300	4	6.6	6.6	23.0
	350	1	1.6	1.6	24.6
	400	3	4.9	4.9	29.5
	500	6	9.8	9.8	39.3
	800	2	3.3	3.3	42.6
	1000	8	13.1	13.1	55.7
	1500	4	6.6	6.6	62.3
	2000	8	13.1	13.1	75.4
	2500	1	1.6	1.6	77.0
	3000	1	1.6	1.6	78.7
	4000	1	1.6	1.6	80.3
	5000	2	3.3	3.3	83.6
	8000	1	1.6	1.6	85.2
	9000	1	1.6	1.6	86.9
	10000	2	3.3	3.3	90.2
	20000	1	1.6	1.6	91.8
	NA-LEGIT SKIP	4	6.6	6.6	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Gaming machine in Montana past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	27	44.3	44.3	44.3
	Did not play	30	49.2	49.2	93.4
	NA-LEGIT SKIP	4	6.6	6.6	100.0
	Total	61	100.0	100.0	

Card games in Montana

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	19	31.1	31.1	31.1
	Did not play	42	68.9	68.9	100.0
	Total	61	100.0	100.0	

Spent Card games in Montana

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7	3	4.9	4.9	4.9
	20	3	4.9	4.9	9.8
	100	3	4.9	4.9	14.8
	130	1	1.6	1.6	16.4
	400	1	1.6	1.6	18.0
	500	1	1.6	1.6	19.7
	600	2	3.3	3.3	23.0
	800	1	1.6	1.6	24.6
	1000	1	1.6	1.6	26.2
	5000	1	1.6	1.6	27.9
	9000	1	1.6	1.6	29.5
	NA-LEGIT SKIP	42	68.9	68.9	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Card games in Montana past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	5	8.2	8.2	8.2
	Did not play	14	23.0	23.0	31.1
	NA-LEGIT SKIP	42	68.9	68.9	100.0
	Total	61	100.0	100.0	

Gaming machines outside Montana

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	39	63.9	63.9	63.9
	Did not play	22	36.1	36.1	100.0
	Total	61	100.0	100.0	

Spent Gaming machines outside Montana

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	2	3.3	3.3	3.3
	7	9	14.8	14.8	18.0
	20	1	1.6	1.6	19.7
	50	4	6.6	6.6	26.2
	60	2	3.3	3.3	29.5
	100	4	6.6	6.6	36.1
	200	4	6.6	6.6	42.6
	500	1	1.6	1.6	44.3
	800	1	1.6	1.6	45.9
	1000	5	8.2	8.2	54.1
	2000	2	3.3	3.3	57.4
	5000	2	3.3	3.3	60.7
	NA-LEGIT SKIP	22	36.1	36.1	96.7
	DK	1	1.6	1.6	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Gaming machines outside Montana past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	7	11.5	11.5	11.5
	Did not play	32	52.5	52.5	63.9
	NA-LEGIT SKIP	22	36.1	36.1	100.0
	Total	61	100.0	100.0	

Table games outside Montana

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	17	27.9	27.9	27.9
	Did not play	44	72.1	72.1	100.0
	Total	61	100.0	100.0	

Spent Table games outside Montana

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7	1	1.6	1.6	1.6
	25	1	1.6	1.6	3.3
	50	2	3.3	3.3	6.6
	60	1	1.6	1.6	8.2
	100	1	1.6	1.6	9.8
	200	2	3.3	3.3	13.1
	300	1	1.6	1.6	14.8
	400	1	1.6	1.6	16.4
	500	2	3.3	3.3	19.7
	800	1	1.6	1.6	21.3
	1000	2	3.3	3.3	24.6
	5000	1	1.6	1.6	26.2
	NA-LEGIT SKIP	44	72.1	72.1	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Table games outside Montana past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	2	3.3	3.3	3.3
	Did not play	15	24.6	24.6	27.9
	NA-LEGIT SKIP	44	72.1	72.1	100.0
	Total	61	100.0	100.0	

High stakes card games

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	7	11.5	11.5	11.5
	Did not play	54	88.5	88.5	100.0
	Total	61	100.0	100.0	

Spent High stakes card games

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7	1	1.6	1.6	1.6
	40	1	1.6	1.6	3.3
	50	1	1.6	1.6	4.9
	500	1	1.6	1.6	6.6
	600	1	1.6	1.6	8.2
	2000	1	1.6	1.6	9.8
	NA-LEGIT SKIP	54	88.5	88.5	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

High stakes card games past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	1	1.6	1.6	1.6
	Did not play	6	9.8	9.8	11.5
	NA-LEGIT SKIP	54	88.5	88.5	100.0
	Total	61	100.0	100.0	

Sports pools

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	36	59.0	59.0	59.0
	Did not play	25	41.0	41.0	100.0
	Total	61	100.0	100.0	

Spent Sports pools

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	1.6	1.6	1.6
	2	1	1.6	1.6	3.3
	5	13	21.3	21.3	24.6
	7	2	3.3	3.3	27.9
	10	4	6.6	6.6	34.4
	15	2	3.3	3.3	37.7
	20	4	6.6	6.6	44.3
	50	5	8.2	8.2	52.5
	100	2	3.3	3.3	55.7
	200	1	1.6	1.6	57.4
	NA-LEGIT SKIP	25	41.0	41.0	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Sports pools past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	9	14.8	14.8	14.8
	Did not play	27	44.3	44.3	59.0
	NA-LEGIT SKIP	25	41.0	41.0	100.0
	Total	61	100.0	100.0	

Outcome of sports events

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	24	39.3	39.3	39.3
	Did not play	37	60.7	60.7	100.0
	Total	61	100.0	100.0	

Spent Outcome of sports events

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	1	1.6	1.6	1.6
	5	4	6.6	6.6	8.2
	7	3	4.9	4.9	13.1
	10	2	3.3	3.3	16.4
	20	3	4.9	4.9	21.3
	25	1	1.6	1.6	23.0
	40	1	1.6	1.6	24.6
	50	4	6.6	6.6	31.1
	75	1	1.6	1.6	32.8
	100	1	1.6	1.6	34.4
	150	1	1.6	1.6	36.1
	200	1	1.6	1.6	37.7
	NA-LEGIT SKIP	37	60.7	60.7	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Outcome of sports events past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	5	8.2	8.2	8.2
	Did not play	19	31.1	31.1	39.3
	NA-LEGIT SKIP	37	60.7	60.7	100.0
	Total	61	100.0	100.0	

Horse racing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	33	54.1	54.1	54.1
	Did not play	28	45.9	45.9	100.0
	Total	61	100.0	100.0	

Spent Horse racing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	1	1.6	1.6	1.6
	5	1	1.6	1.6	3.3
	7	9	14.8	14.8	18.0
	10	2	3.3	3.3	21.3
	15	1	1.6	1.6	23.0
	20	3	4.9	4.9	27.9
	25	2	3.3	3.3	31.1
	40	1	1.6	1.6	32.8
	50	2	3.3	3.3	36.1
	100	5	8.2	8.2	44.3
	120	1	1.6	1.6	45.9
	125	1	1.6	1.6	47.5
	200	1	1.6	1.6	49.2
	300	1	1.6	1.6	50.8
	500	1	1.6	1.6	52.5
	NA-LEGIT SKIP	28	45.9	45.9	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Horse racing past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	1	1.6	1.6	1.6
	Did not play	32	52.5	52.5	54.1
	NA-LEGIT SKIP	28	45.9	45.9	100.0
	Total	61	100.0	100.0	

Games of skill for money

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	34	55.7	55.7	55.7
	Did not play	27	44.3	44.3	100.0
	Total	61	100.0	100.0	

Spent Games of skill for money

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	1.6	1.6	1.6
	2	1	1.6	1.6	3.3
	5	3	4.9	4.9	8.2
	7	6	9.8	9.8	18.0
	10	2	3.3	3.3	21.3
	20	3	4.9	4.9	26.2
	24	1	1.6	1.6	27.9
	25	2	3.3	3.3	31.1
	30	1	1.6	1.6	32.8
	40	1	1.6	1.6	34.4
	50	4	6.6	6.6	41.0
	100	3	4.9	4.9	45.9
	500	1	1.6	1.6	47.5
	NA-LEGIT SKIP	27	44.3	44.3	91.8
	DK	1	1.6	1.6	93.4
	MISSING	4	6.6	6.6	100.0
	Total	61	100.0	100.0	

Games of skill for money past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	10	16.4	16.4	16.4
	Did not play	24	39.3	39.3	55.7
	NA-LEGIT SKIP	27	44.3	44.3	100.0
	Total	61	100.0	100.0	

Telephone or computer wagering

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Played	2	3.3	3.3	3.3
	Did not play	59	96.7	96.7	100.0
	Total	61	100.0	100.0	

Spent Telephone or computer wagering

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NA-LEGIT SKIP	59	96.7	96.7	96.7
	MISSING	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

Telephone or computer wagering past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NA-LEGIT SKIP	59	96.7	96.7	96.7
	MISSING	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

Other type of gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	13	21.3	21.3	21.3
	No	47	77.0	77.0	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Spent Other type of gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7	2	3.3	3.3	3.3
	10	2	3.3	3.3	6.6
	25	1	1.6	1.6	8.2
	50	2	3.3	3.3	11.5
	200	1	1.6	1.6	13.1
	300	1	1.6	1.6	14.8
	400	1	1.6	1.6	16.4
	500	1	1.6	1.6	18.0
	900	1	1.6	1.6	19.7
	NA-LEGIT SKIP	47	77.0	77.0	96.7
	MISSING	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

Other type of gambling past year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	6	9.8	9.8	9.8
	No	7	11.5	11.5	21.3
	NA-LEGIT SKIP	47	77.0	77.0	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

GA Individual SOGS and DSM Items

Gamble to recoup losses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Some of the time	4	6.6	6.6	6.6
	Most of the time	24	39.3	39.3	45.9
	Every time	33	54.1	54.1	100.0
	Total	61	100.0	100.0	

Past Year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	25	41.0	41.0	41.0
	Some of the time	8	13.1	13.1	54.1
	Most of the time	17	27.9	27.9	82.0
	Every time	10	16.4	16.4	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Claimed to win when actually lost

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	11	18.0	18.0	18.0
	Some of the time	20	32.8	32.8	50.8
	Most of the time	23	37.7	37.7	88.5
	Every time	7	11.5	11.5	100.0
	Total	61	100.0	100.0	

Past Year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	26	42.6	43.3	43.3
	Some of the time	12	19.7	20.0	63.3
	Most of the time	8	13.1	13.3	76.7
	Every time	4	6.6	6.7	83.3
	NA-LEGIT SKIP	10	16.4	16.7	100.0
	Total	60	98.4	100.0	
Missing	System	1	1.6		
Total		61	100.0		

Spend more gambling than intended

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	60	98.4	98.4	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Past Year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	33	54.1	54.1	54.1
	No	26	42.6	42.6	96.7
	MISSING	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

People critized your gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	56	91.8	91.8	91.8
	No	4	6.6	6.6	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Past Year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	31	50.8	50.8	50.8
	No	25	41.0	41.0	91.8
	NA-LEGIT SKIP	4	6.6	6.6	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Felt guilty about gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	60	98.4	98.4	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Past Year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	35	57.4	58.3	58.3
	No	23	37.7	38.3	96.7
	MISSING	2	3.3	3.3	100.0
	Total	60	98.4	100.0	
Missing	System	1	1.6		
Total		61	100.0		

Like to stop but can not

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	57	93.4	93.4	93.4
	No	2	3.3	3.3	96.7
	DK	1	1.6	1.6	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Past Year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	31	50.8	50.8	50.8
	No	26	42.6	42.6	93.4
	NA-LEGIT SKIP	3	4.9	4.9	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Hidden gambling from others

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	55	90.2	90.2	90.2
	No	5	8.2	8.2	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Past Year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	27	44.3	44.3	44.3
	No	28	45.9	45.9	90.2
	NA-LEGIT SKIP	5	8.2	8.2	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Arguments w/household over money

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	57	93.4	93.4	93.4
	No	2	3.3	3.3	96.7
	MISSING	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

Argued about money and gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	56	91.8	91.8	91.8
	No	1	1.6	1.6	93.4
	NA-LEGIT SKIP	2	3.3	3.3	96.7
	MISSING	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

Arguments Past Year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	29	47.5	47.5	47.5
	No	27	44.3	44.3	91.8
	NA-LEGIT SKIP	3	4.9	4.9	96.7
	MISSING	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

Missed work due to gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	44	72.1	72.1	72.1
	No	15	24.6	24.6	96.7
	MISSING	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

Past Year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	17	27.9	27.9	27.9
	No	28	45.9	45.9	73.8
	NA-LEGIT SKIP	14	23.0	23.0	96.7
	MISSING	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

Borrowed money not paid back

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	48	78.7	78.7	78.7
	No	12	19.7	19.7	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Past Year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	21	34.4	34.4	34.4
	No	29	47.5	47.5	82.0
	NA-LEGIT SKIP	10	16.4	16.4	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Used household money for gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	59	96.7	96.7	96.7
	No	1	1.6	1.6	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Past Year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	28	45.9	45.9	45.9
	No	31	50.8	50.8	96.7
	NA-LEGIT SKIP	1	1.6	1.6	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Borrowed money spouse for gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	46	75.4	75.4	75.4
	No	13	21.3	21.3	96.7
	MISSING	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

Past Year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	22	36.1	36.1	36.1
	No	23	37.7	37.7	73.8
	NA-LEGIT SKIP	13	21.3	21.3	95.1
	MISSING	3	4.9	4.9	100.0
	Total	61	100.0	100.0	

Borrowed money other relatives for gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	41	67.2	67.2	67.2
	No	19	31.1	31.1	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Past Year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	19	31.1	31.1	31.1
	No	24	39.3	39.3	70.5
	NA-LEGIT SKIP	17	27.9	27.9	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Borrowed money from financial institution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	43	70.5	70.5	70.5
	No	17	27.9	27.9	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Past Year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	20	32.8	32.8	32.8
	No	23	37.7	37.7	70.5
	NA-LEGIT SKIP	17	27.9	27.9	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Cash withdrawals on credit cards for gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	41	67.2	67.2	67.2
	No	19	31.1	31.1	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Past Year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	19	31.1	31.1	31.1
	No	24	39.3	39.3	70.5
	NA-LEGIT SKIP	17	27.9	27.9	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Money from loan sharks for gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	10	16.4	16.4	16.4
	No	49	80.3	80.3	96.7
	MISSING	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

Past Year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	6	9.8	9.8	9.8
	No	9	14.8	14.8	24.6
	NA-LEGIT SKIP	45	73.8	73.8	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Cased in stocks & bonds for gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	25	41.0	41.0	41.0
	No	33	54.1	54.1	95.1
	MISSING	3	4.9	4.9	100.0
	Total	61	100.0	100.0	

Past Year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	7	11.5	11.5	11.5
	No	21	34.4	34.4	45.9
	NA-LEGIT SKIP	30	49.2	49.2	95.1
	MISSING	3	4.9	4.9	100.0
	Total	61	100.0	100.0	

Sold property for gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	42	68.9	68.9	68.9
	No	18	29.5	29.5	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Past Year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	20	32.8	32.8	32.8
	No	24	39.3	39.3	72.1
	NA-LEGIT SKIP	16	26.2	26.2	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Bounced checks for gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	43	70.5	70.5	70.5
	No	17	27.9	27.9	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Past Year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	17	27.9	27.9	27.9
	No	25	41.0	41.0	68.9
	NA-LEGIT SKIP	16	26.2	26.2	95.1
	DK	1	1.6	1.6	96.7
	MISSING	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

Feel you had a gambling problem

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	58	95.1	95.1	95.1
	No	2	3.3	3.3	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Past Year

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	36	59.0	59.0	59.0
	No	21	34.4	34.4	93.4
	NA-LEGIT SKIP	2	3.3	3.3	96.7
	MISSING	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

Think about gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	3	4.9	4.9	4.9
	Once or twice	5	8.2	8.2	13.1
	Sometimes	28	45.9	45.9	59.0
	Often	25	41.0	41.0	100.0
	Total	61	100.0	100.0	

More money for excitement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	27	44.3	44.3	44.3
	Once or twice	5	8.2	8.2	52.5
	Sometimes	9	14.8	14.8	67.2
	Often	20	32.8	32.8	100.0
	Total	61	100.0	100.0	

Restless when trying quit gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	19	31.1	31.1	31.1
	Once or twice	4	6.6	6.6	37.7
	Sometimes	12	19.7	19.7	57.4
	Often	26	42.6	42.6	100.0
	Total	61	100.0	100.0	

Gambled to escape problems

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	29	47.5	47.5	47.5
	Once or twice	3	4.9	4.9	52.5
	Sometimes	6	9.8	9.8	62.3
	Often	23	37.7	37.7	100.0
	Total	61	100.0	100.0	

Returned to recoup gambling losses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	27	44.3	44.3	44.3
	Once or twice	1	1.6	1.6	45.9
	Sometimes	7	11.5	11.5	57.4
	Often	26	42.6	42.6	100.0
	Total	61	100.0	100.0	

Lied to hide gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	24	39.3	39.3	39.3
	Once or twice	1	1.6	1.6	41.0
	Sometimes	13	21.3	21.3	62.3
	Often	23	37.7	37.7	100.0
	Total	61	100.0	100.0	

Repeated unsuccessfully to quit gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	27	44.3	44.3	44.3
	Once or twice	4	6.6	6.6	50.8
	Sometimes	7	11.5	11.5	62.3
	Often	22	36.1	36.1	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Illegal to pay gambling debts

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	30	49.2	49.2	49.2
	Once or twice	7	11.5	11.5	60.7
	Sometimes	14	23.0	23.0	83.6
	Often	10	16.4	16.4	100.0
	Total	61	100.0	100.0	

Risked opportunity because of gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	31	50.8	50.8	50.8
	Once or twice	12	19.7	19.7	70.5
	Sometimes	4	6.6	6.6	77.0
	Often	12	19.7	19.7	96.7
	DK	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

Sought help for gambling finances

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	28	45.9	45.9	45.9
	Once or twice	14	23.0	23.0	68.9
	Sometimes	5	8.2	8.2	77.0
	Often	14	23.0	23.0	100.0
	Total	61	100.0	100.0	

GA Prevalance Rates

DSM Score

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	3	4.9	4.9	4.9
	1.00	14	23.0	23.0	27.9
	2.00	4	6.6	6.6	34.4
	3.00	3	4.9	4.9	39.3
	4.00	1	1.6	1.6	41.0
	5.00	1	1.6	1.6	42.6
	6.00	2	3.3	3.3	45.9
	8.00	6	9.8	9.8	55.7
	9.00	8	13.1	13.1	68.9
	10.00	19	31.1	31.1	100.0
	Total	61	100.0	100.0	

Lifetime SOGS Score

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	1	1.6	1.6	1.6
	9.00	1	1.6	1.6	3.3
	10.00	1	1.6	1.6	4.9
	11.00	3	4.9	4.9	9.8
	12.00	1	1.6	1.6	11.5
	13.00	3	4.9	4.9	16.4
	14.00	9	14.8	14.8	31.1
	15.00	6	9.8	9.8	41.0
	16.00	9	14.8	14.8	55.7
	17.00	7	11.5	11.5	67.2
	18.00	12	19.7	19.7	86.9
	19.00	5	8.2	8.2	95.1
	20.00	3	4.9	4.9	100.0
	Total	61	100.0	100.0	

Current SOGS Score

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	17	27.9	27.9	27.9
	1.00	3	4.9	4.9	32.8
	2.00	6	9.8	9.8	42.6
	3.00	1	1.6	1.6	44.3
	7.00	1	1.6	1.6	45.9
	8.00	1	1.6	1.6	47.5
	9.00	3	4.9	4.9	52.5
	10.00	5	8.2	8.2	60.7
	12.00	5	8.2	8.2	68.9
	13.00	3	4.9	4.9	73.8
	14.00	1	1.6	1.6	75.4
	15.00	2	3.3	3.3	78.7
	16.00	7	11.5	11.5	90.2
	17.00	1	1.6	1.6	91.8
	18.00	2	3.3	3.3	95.1
	19.00	1	1.6	1.6	96.7
	20.00	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

GA History Questions

Feel your parents have a gambling problem?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Parent with problem	24	39.3	39.3	39.3
	No problem	35	57.4	57.4	96.7
	DK	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

Parent with a gambling problem-1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Father	15	24.6	24.6	24.6
	Mother	8	13.1	13.1	37.7
	NA-LEGIT SKIP	37	60.7	60.7	98.4
	DK	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Parent with a gambling problem-2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1	1.6	1.6	1.6
	Father	1	1.6	1.6	3.3
	Mother	3	4.9	4.9	8.2
	Stepfather	1	1.6	1.6	9.8
	NA-LEGIT SKIP	55	90.2	90.2	100.0
	Total	61	100.0	100.0	

Age when first gambled

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	2	3.3	3.3	3.3
	6	1	1.6	1.6	4.9
	7	1	1.6	1.6	6.6
	8	6	9.8	9.8	16.4
	9	1	1.6	1.6	18.0
	10	2	3.3	3.3	21.3
	12	6	9.8	9.8	31.1
	13	1	1.6	1.6	32.8
	14	3	4.9	4.9	37.7
	15	5	8.2	8.2	45.9
	16	3	4.9	4.9	50.8
	17	2	3.3	3.3	54.1
	18	6	9.8	9.8	63.9
	20	3	4.9	4.9	68.9
	21	2	3.3	3.3	72.1
	22	1	1.6	1.6	73.8
	23	2	3.3	3.3	77.0
	24	2	3.3	3.3	80.3
	25	2	3.3	3.3	83.6
	26	1	1.6	1.6	85.2
	38	1	1.6	1.6	86.9
	45	2	3.3	3.3	90.2
	50	2	3.3	3.3	93.4
	DK	1	1.6	1.6	95.1
	REFUSED	3	4.9	4.9	100.0
	Total	61	100.0	100.0	

Game played when first gambled

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Other lottery	1	1.6	1.6	1.6
	Live bingo	3	4.9	4.9	6.6
	Live Keno	1	1.6	1.6	8.2
	Charitable	1	1.6	1.6	9.8
	Instate machines	13	21.3	21.3	31.1
	MT casino cards	3	4.9	4.9	36.1
	Outstate machines	3	4.9	4.9	41.0
	Table games outstate	1	1.6	1.6	42.6
	Sports pools	3	4.9	4.9	47.5
	Sporting events	2	3.3	3.3	50.8
	Horse racing	7	11.5	11.5	62.3
	Games of skill	1	1.6	1.6	63.9
	Other gambling	12	19.7	19.7	83.6
	Small stakes cards	6	9.8	9.8	93.4
	DK	1	1.6	1.6	95.1
	MISSING	3	4.9	4.9	100.0
	Total	61	100.0	100.0	

Any time gambling made you nervous?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Nervous	54	88.5	88.5	88.5
	Not nervous	7	11.5	11.5	100.0
	Total	61	100.0	100.0	

Age when nervous

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	8	2	3.3	3.3	3.3
	10	2	3.3	3.3	6.6
	13	1	1.6	1.6	8.2
	14	1	1.6	1.6	9.8
	17	1	1.6	1.6	11.5
	18	2	3.3	3.3	14.8
	20	1	1.6	1.6	16.4
	21	3	4.9	4.9	21.3
	22	1	1.6	1.6	23.0
	23	3	4.9	4.9	27.9
	24	3	4.9	4.9	32.8
	26	2	3.3	3.3	36.1
	27	1	1.6	1.6	37.7
	28	2	3.3	3.3	41.0
	30	5	8.2	8.2	49.2
	33	1	1.6	1.6	50.8
	34	1	1.6	1.6	52.5
	35	2	3.3	3.3	55.7
	38	2	3.3	3.3	59.0
	40	3	4.9	4.9	63.9
	41	1	1.6	1.6	65.6
	44	1	1.6	1.6	67.2
	45	2	3.3	3.3	70.5
	46	1	1.6	1.6	72.1
	49	1	1.6	1.6	73.8
	50	2	3.3	3.3	77.0
	55	2	3.3	3.3	80.3
	70	1	1.6	1.6	82.0
	NA-LEGIT SKIP	7	11.5	11.5	93.4
	MISSING	4	6.6	6.6	100.0
	Total	61	100.0	100.0	

Game that made you nervous

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Live bingo	1	1.6	1.6	1.6
	Live Keno	2	3.3	3.3	4.9
	Instate machines	31	50.8	50.8	55.7
	MT casino cards	4	6.6	6.6	62.3
	Table games outstate	2	3.3	3.3	65.6
	Horse racing	3	4.9	4.9	70.5
	Games of skill	1	1.6	1.6	72.1
	Other gambling	5	8.2	8.2	80.3
	Small stakes cards	2	3.3	3.3	83.6
	NA-LEGIT SKIP	7	11.5	11.5	95.1
	MISSING	3	4.9	4.9	100.0
	Total	61	100.0	100.0	

Family member

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Does Not Apply	30	49.2	49.2	49.2
	Applies	31	50.8	50.8	100.0
	Total	61	100.0	100.0	

Friend

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Does Not Apply	36	59.0	59.0	59.0
	Applies	25	41.0	41.0	100.0
	Total	61	100.0	100.0	

Family doctor

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Does Not Apply	57	93.4	93.4	93.4
	Applies	4	6.6	6.6	100.0
	Total	61	100.0	100.0	

GA

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Applies	61	100.0	100.0	100.0

Instate treatment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Does Not Apply	50	82.0	82.0	82.0
	Applies	11	18.0	18.0	100.0
	Total	61	100.0	100.0	

Outstate treatment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Does Not Apply	58	95.1	95.1	95.1
	Applies	3	4.9	4.9	100.0
	Total	61	100.0	100.0	

VA

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Does Not Apply	58	95.1	95.1	95.1
	Applies	3	4.9	4.9	100.0
	Total	61	100.0	100.0	

EAP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Does Not Apply	55	90.2	90.2	90.2
	Applies	6	9.8	9.8	100.0
	Total	61	100.0	100.0	

Therapist

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Does Not Apply	44	72.1	72.1	72.1
	Applies	17	27.9	27.9	100.0
	Total	61	100.0	100.0	

Other counselor

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Does Not Apply	41	67.2	67.2	67.2
	Applies	20	32.8	32.8	100.0
	Total	61	100.0	100.0	

Religious leader

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Does Not Apply	47	77.0	77.0	77.0
	Applies	14	23.0	23.0	100.0
	Total	61	100.0	100.0	

Instate hospital

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Does Not Apply	50	82.0	82.0	82.0
	Applies	11	18.0	18.0	100.0
	Total	61	100.0	100.0	

Outstate hospital

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		5	8.2	8.2	8.2
	Does Not Apply	54	88.5	88.5	96.7
	Applies	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

12-step program

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		5	8.2	8.2	8.2
	Does Not Apply	53	86.9	86.9	95.1
	Applies	3	4.9	4.9	100.0
	Total	61	100.0	100.0	

Other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		5	8.2	8.2	8.2
	Does Not Apply	53	86.9	86.9	95.1
	Applies	3	4.9	4.9	100.0
	Total	61	100.0	100.0	

Number of nights in gambling treatment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	40	65.6	70.2	70.2
	2	1	1.6	1.8	71.9
	4	1	1.6	1.8	73.7
	5	1	1.6	1.8	75.4
	15	1	1.6	1.8	77.2
	28	4	6.6	7.0	84.2
	30	4	6.6	7.0	91.2
	33	1	1.6	1.8	93.0
	35	1	1.6	1.8	94.7
	37	1	1.6	1.8	96.5
	90	2	3.3	3.5	100.0
	Total	57	93.4	100.0	
Missing	System	4	6.6		
Total		61	100.0		

Number of counseling sessions in gambling treatment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	31	50.8	52.5	52.5
	1	1	1.6	1.7	54.2
	2	3	4.9	5.1	59.3
	3	1	1.6	1.7	61.0
	4	1	1.6	1.7	62.7
	6	1	1.6	1.7	64.4
	10	7	11.5	11.9	76.3
	12	1	1.6	1.7	78.0
	20	1	1.6	1.7	79.7
	25	3	4.9	5.1	84.7
	28	1	1.6	1.7	86.4
	30	1	1.6	1.7	88.1
	32	1	1.6	1.7	89.8
	50	2	3.3	3.4	93.2
	100 or more	3	4.9	5.1	98.3
	DK	1	1.6	1.7	100.0
	Total	59	96.7	100.0	
Missing	System	2	3.3		
Total		61	100.0		

No payment needed

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	3.3	3.3	3.3
	Does Not Apply	33	54.1	54.1	57.4
	Applies	26	42.6	42.6	100.0
	Total	61	100.0	100.0	

Medicare

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	3.3	3.3	3.3
	Does Not Apply	56	91.8	91.8	95.1
	Applies	3	4.9	4.9	100.0
	Total	61	100.0	100.0	

Medicaid

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	3.3	3.3	3.3
	Does Not Apply	58	95.1	95.1	98.4
	Applies	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Private insurance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	3.3	3.3	3.3
	Does Not Apply	48	78.7	78.7	82.0
	Applies	11	18.0	18.0	100.0
	Total	61	100.0	100.0	

VA/CHAMPUS/TRICARE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		3	4.9	4.9	4.9
	Does Not Apply	57	93.4	93.4	98.4
	Applies	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Self pay

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	3.3	3.3	3.3
	Does Not Apply	40	65.6	65.6	68.9
	Applies	19	31.1	31.1	100.0
	Total	61	100.0	100.0	

Other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	6.6	6.6	6.6
	Does Not Apply	52	85.2	85.2	91.8
	Applies	5	8.2	8.2	100.0
	Total	61	100.0	100.0	

DK

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	6.6	6.6	6.6
	Does Not Apply	55	90.2	90.2	96.7
	Applies	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

Depression

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	1.6	1.6	1.6
	No	29	47.5	47.5	49.2
	Yes	29	47.5	47.5	96.7
	2	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

Using alcohol

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	1.6	1.6	1.6
	No	44	72.1	72.1	73.8
	Yes	13	21.3	21.3	95.1
	2	3	4.9	4.9	100.0
	Total	61	100.0	100.0	

Using other drugs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	1.6	1.6	1.6
	No	46	75.4	75.4	77.0
	Yes	10	16.4	16.4	93.4
	2	4	6.6	6.6	100.0
	Total	61	100.0	100.0	

Compulsive overeating

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	1.6	1.6	1.6
	No	50	82.0	82.0	83.6
	Yes	6	9.8	9.8	93.4
	2	4	6.6	6.6	100.0
	Total	61	100.0	100.0	

Anorexia or bulimia

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	1.6	1.6	1.6
	No	56	91.8	91.8	93.4
	2	4	6.6	6.6	100.0
	Total	61	100.0	100.0	

Compulsive shopping

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	1.6	1.6	1.6
	No	51	83.6	83.6	85.2
	Yes	5	8.2	8.2	93.4
	2	4	6.6	6.6	100.0
	Total	61	100.0	100.0	

Other problem

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	1.6	1.6	1.6
	No	41	67.2	67.2	68.9
	Yes	16	26.2	26.2	95.1
	2	3	4.9	4.9	100.0
	Total	61	100.0	100.0	

Family member

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	3.3	3.3	3.3
	Does Not Apply	44	72.1	72.1	75.4
	Applies	15	24.6	24.6	100.0
	Total	61	100.0	100.0	

Friend

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	3.3	3.3	3.3
	Does Not Apply	44	72.1	72.1	75.4
	Applies	15	24.6	24.6	100.0
	Total	61	100.0	100.0	

Family doctor

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	3.3	3.3	3.3
	Does Not Apply	46	75.4	75.4	78.7
	Applies	13	21.3	21.3	100.0
	Total	61	100.0	100.0	

GA

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	3.3	3.3	3.3
	Does Not Apply	32	52.5	52.5	55.7
	Applies	27	44.3	44.3	100.0
	Total	61	100.0	100.0	

Instate treatment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	3.3	3.3	3.3
	Does Not Apply	50	82.0	82.0	85.2
	Applies	9	14.8	14.8	100.0
	Total	61	100.0	100.0	

Outstate treatment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	6.6	6.6	6.6
	Does Not Apply	53	86.9	86.9	93.4
	Applies	4	6.6	6.6	100.0
	Total	61	100.0	100.0	

VA

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	6.6	6.6	6.6
	Does Not Apply	53	86.9	86.9	93.4
	Applies	4	6.6	6.6	100.0
	Total	61	100.0	100.0	

EAP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	6.6	6.6	6.6
	Does Not Apply	52	85.2	85.2	91.8
	Applies	5	8.2	8.2	100.0
	Total	61	100.0	100.0	

Therapist

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		3	4.9	4.9	4.9
	Does Not Apply	43	70.5	70.5	75.4
	Applies	15	24.6	24.6	100.0
	Total	61	100.0	100.0	

Other counselor

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		3	4.9	4.9	4.9
	Does Not Apply	44	72.1	72.1	77.0
	Applies	14	23.0	23.0	100.0
	Total	61	100.0	100.0	

Religious leader

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		3	4.9	4.9	4.9
	Does Not Apply	49	80.3	80.3	85.2
	Applies	9	14.8	14.8	100.0
	Total	61	100.0	100.0	

Instate hospital

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	6.6	6.6	6.6
	Does Not Apply	47	77.0	77.0	83.6
	Applies	10	16.4	16.4	100.0
	Total	61	100.0	100.0	

Outstate hospital

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	6.6	6.6	6.6
	Does Not Apply	53	86.9	86.9	93.4
	Applies	4	6.6	6.6	100.0
	Total	61	100.0	100.0	

12-step program

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		5	8.2	8.2	8.2
	Does Not Apply	53	86.9	86.9	95.1
	Applies	3	4.9	4.9	100.0
	Total	61	100.0	100.0	

Other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		5	8.2	8.2	8.2
	Does Not Apply	52	85.2	85.2	93.4
	Applies	4	6.6	6.6	100.0
	Total	61	100.0	100.0	

Number of nights in other treatment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	42	68.9	73.7	73.7
	2	1	1.6	1.8	75.4
	3	1	1.6	1.8	77.2
	4	1	1.6	1.8	78.9
	5	1	1.6	1.8	80.7
	15	1	1.6	1.8	82.5
	28	2	3.3	3.5	86.0
	30	2	3.3	3.5	89.5
	33	1	1.6	1.8	91.2
	35	1	1.6	1.8	93.0
	37	1	1.6	1.8	94.7
	90	2	3.3	3.5	98.2
	180	1	1.6	1.8	100.0
	Total	57	93.4	100.0	
Missing	System	4	6.6		
Total		61	100.0		

Number of counseling sessions in other treatment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	37	60.7	63.8	63.8
	1	1	1.6	1.7	65.5
	2	2	3.3	3.4	69.0
	5	1	1.6	1.7	70.7
	8	1	1.6	1.7	72.4
	10	3	4.9	5.2	77.6
	12	1	1.6	1.7	79.3
	20	1	1.6	1.7	81.0
	25	2	3.3	3.4	84.5
	30	1	1.6	1.7	86.2
	32	1	1.6	1.7	87.9
	33	1	1.6	1.7	89.7
	100 or more	5	8.2	8.6	98.3
	DK	1	1.6	1.7	100.0
Total		58	95.1	100.0	
Missing	System	3	4.9		
Total		61	100.0		

Medicare

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		5	8.2	8.2	8.2
	Does Not Apply	53	86.9	86.9	95.1
	Applies	3	4.9	4.9	100.0
	Total	61	100.0	100.0	

Medicaid

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		5	8.2	8.2	8.2
	Does Not Apply	53	86.9	86.9	95.1
	Applies	3	4.9	4.9	100.0
	Total	61	100.0	100.0	

Private insurance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		5	8.2	8.2	8.2
	Does Not Apply	48	78.7	78.7	86.9
	Applies	8	13.1	13.1	100.0
	Total	61	100.0	100.0	

VA/CHAMPUS/TRICARE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		5	8.2	8.2	8.2
	Does Not Apply	54	88.5	88.5	96.7
	Applies	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

Self pay

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		3	4.9	4.9	4.9
	Does Not Apply	45	73.8	73.8	78.7
	Applies	13	21.3	21.3	100.0
	Total	61	100.0	100.0	

Other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		4	6.6	6.6	6.6
	Does Not Apply	50	82.0	82.0	88.5
	Applies	7	11.5	11.5	100.0
	Total	61	100.0	100.0	

DK

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		5	8.2	8.2	8.2
	Does Not Apply	53	86.9	86.9	95.1
	Applies	3	4.9	4.9	100.0
	Total	61	100.0	100.0	

Ever wanted to die?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	56	91.8	91.8	91.8
	No	5	8.2	8.2	100.0
	Total	61	100.0	100.0	

Thought of committing suicide

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	53	86.9	86.9	86.9
	No	8	13.1	13.1	100.0
	Total	61	100.0	100.0	

Planned to commit suicide

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	33	54.1	54.1	54.1
	No	27	44.3	44.3	98.4
	DK	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Ever attempted suicide

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	17	27.9	27.9	27.9
	No	43	70.5	70.5	98.4
	DK	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Involved in bankruptcy court?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	16	26.2	26.2	26.2
	No	44	72.1	72.1	98.4
	DK	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Type of bankruptcy court involvement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	R debtor	16	26.2	26.2	26.2
	NA-LEGIT SKIP	45	73.8	73.8	100.0
	Total	61	100.0	100.0	

Money owed as result of gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	3	4.9	4.9	4.9
	Less than \$1,000	4	6.6	6.6	11.5
	\$1,000-4,999	11	18.0	18.0	29.5
	\$5,000-9,999	7	11.5	11.5	41.0
	\$10,000-24,999	13	21.3	21.3	62.3
	\$25,000-49,999	9	14.8	14.8	77.0
	\$50,000-99,999	8	13.1	13.1	90.2
	\$100,000-249,999	3	4.9	4.9	95.1
	\$250,000 or more	1	1.6	1.6	96.7
	MISSING	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

Number of days school or work missed

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	33	54.1	54.1	54.1
	1	1	1.6	1.6	55.7
	2	1	1.6	1.6	57.4
	3	2	3.3	3.3	60.7
	5	2	3.3	3.3	63.9
	7	1	1.6	1.6	65.6
	9	1	1.6	1.6	67.2
	10	2	3.3	3.3	70.5
	12	1	1.6	1.6	72.1
	30	3	4.9	4.9	77.0
	40	1	1.6	1.6	78.7
	50	2	3.3	3.3	82.0
	60	2	3.3	3.3	85.2
	75	1	1.6	1.6	86.9
	96	3	4.9	4.9	91.8
	98	1	1.6	1.6	93.4
	200	1	1.6	1.6	95.1
	400	1	1.6	1.6	96.7
	540	1	1.6	1.6	98.4
	DK	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Theft to pay for gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	40	65.6	65.6	65.6
	No	20	32.8	32.8	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Number of times arrested

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	38	62.3	62.3	62.3
	Once	8	13.1	13.1	75.4
	Twice	7	11.5	11.5	86.9
	Three or more	5	8.2	8.2	95.1
	NA-LEGIT SKIP	1	1.6	1.6	96.7
	DK	1	1.6	1.6	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Arrested because of gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1	1.6	1.6	1.6
	Yes	7	11.5	11.5	13.1
	No	15	24.6	24.6	37.7
	NA-LEGIT SKIP	38	62.3	62.3	100.0
	Total	61	100.0	100.0	

Number of arrests related to gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	1.6	1.6	1.6
	Once	2	3.3	3.3	4.9
	Twice	3	4.9	4.9	9.8
	Three or more	2	3.3	3.3	13.1
	NA-LEGIT SKIP	53	86.9	86.9	100.0
	Total	61	100.0	100.0	

Number of trials on gambling related charges

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	1.6	1.6	1.6
	Never	16	26.2	26.2	27.9
	Twice	3	4.9	4.9	32.8
	Three or more	2	3.3	3.3	36.1
	NA-LEGIT SKIP	39	63.9	63.9	100.0
	Total	61	100.0	100.0	

Number of convictions on gambling related charges

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	1.6	1.6	1.6
	Never	4	6.6	6.6	8.2
	Twice	4	6.6	6.6	14.8
	Three or more	1	1.6	1.6	16.4
	NA-LEGIT SKIP	51	83.6	83.6	100.0
	Total	61	100.0	100.0	

Ever been placed on probation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	3.3	3.3	3.3
	Yes	5	8.2	8.2	11.5
	No	3	4.9	4.9	16.4
	NA-LEGIT SKIP	51	83.6	83.6	100.0
	Total	61	100.0	100.0	

Probation related to gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	3.3	3.3	3.3
	Yes	5	8.2	8.2	11.5
	NA-LEGIT SKIP	54	88.5	88.5	100.0
	Total	61	100.0	100.0	

Ever been incarcerated?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	3.3	3.3	3.3
	Yes	5	8.2	8.2	11.5
	No	3	4.9	4.9	16.4
	NA-LEGIT SKIP	51	83.6	83.6	100.0
	Total	61	100.0	100.0	

Incarceration related to gambling?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		2	3.3	3.3	3.3
	Yes	5	8.2	8.2	11.5
	NA-LEGIT SKIP	54	88.5	88.5	100.0
	Total	61	100.0	100.0	

Number of months incarcerated for gambling offense

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	1.6	1.7	1.7
	2	1	1.6	1.7	3.4
	18	1	1.6	1.7	5.1
	27	1	1.6	1.7	6.8
	56	1	1.6	1.7	8.5
	NA-LEGIT SKIP	54	88.5	91.5	100.0
	Total	59	96.7	100.0	
Missing	System	2	3.3		
Total		61	100.0		

Number of times sued to collect gambling debts

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	50	82.0	82.0	82.0
	Once	2	3.3	3.3	85.2
	Twice	2	3.3	3.3	88.5
	Three or more	4	6.6	6.6	95.1
	DK	1	1.6	1.6	96.7
	MISSING	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

Ever been divorced?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	38	62.3	62.3	62.3
	No	23	37.7	37.7	100.0
	Total	61	100.0	100.0	

Divorced related to gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		1	1.6	1.6	1.6
	Yes	20	32.8	32.8	34.4
	No	17	27.9	27.9	62.3
	NA-LEGIT SKIP	22	36.1	36.1	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Physical arguments with household over gambling

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	17	27.9	27.9	27.9
	No	42	68.9	68.9	96.7
	DK	1	1.6	1.6	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Number of times gambling since attending GA

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	21	34.4	34.4	34.4
	Once	1	1.6	1.6	36.1
	Twice	3	4.9	4.9	41.0
	Three	4	6.6	6.6	47.5
	Five or more	25	41.0	41.0	88.5
	DK	6	9.8	9.8	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

GA Demographics

Marital status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	33	54.1	54.1	54.1
	Widowed	5	8.2	8.2	62.3
	Divorced	17	27.9	27.9	90.2
	Separated	3	4.9	4.9	95.1
	Never married	3	4.9	4.9	100.0
	Total	61	100.0	100.0	

Educational attainment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than HS	2	3.3	3.3	3.3
	HS diploma	30	49.2	49.2	52.5
	Some post HS	12	19.7	19.7	72.1
	Bachelor degree	11	18.0	18.0	90.2
	Master degree	4	6.6	6.6	96.7
	Professional	1	1.6	1.6	98.4
	MISSING	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Employment status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Full-time	31	50.8	50.8	50.8
	Part-time	9	14.8	14.8	65.6
	Student	7	11.5	11.5	77.0
	Keeping house	2	3.3	3.3	80.3
	Disabled	7	11.5	11.5	91.8
	Retired	5	8.2	8.2	100.0
	Total	61	100.0	100.0	

Occupation of respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Mining	1	1.6	1.6	1.6
	Sales	2	3.3	3.3	4.9
	Retail sales	4	6.6	6.6	11.5
	Other services	3	4.9	4.9	16.4
	Clerical	4	6.6	6.6	23.0
	Prof-technical	11	18.0	18.0	41.0
	Manager	6	9.8	9.8	50.8
	Skilled craftsman	5	8.2	8.2	59.0
	Semi skilled	1	1.6	1.6	60.7
	Laborer	2	3.3	3.3	63.9
	Student	2	3.3	3.3	67.2
	Other	6	9.8	9.8	77.0
	NA-LEGIT SKIP	14	23.0	23.0	100.0
	Total	61	100.0	100.0	

Religion

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Protestant	24	39.3	39.3	39.3
	Catholic	14	23.0	23.0	62.3
	Buddhist	1	1.6	1.6	63.9
	BORN-AGAIN CHRISTIAN	3	4.9	4.9	68.9
	NATIVE AMERICAN CHURCH	1	1.6	1.6	70.5
	LDS	1	1.6	1.6	72.1
	Other	8	13.1	13.1	85.2
	None	7	11.5	11.5	96.7
	DK	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

Number contributing to household income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	27	44.3	44.3	44.3
	2	32	52.5	52.5	96.7
	3	1	1.6	1.6	98.4
	5	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Social security income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	12	19.7	19.7	19.7
	No	46	75.4	75.4	95.1
	DK	1	1.6	1.6	96.7
	MISSING	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

Unemployment Compensation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	6	9.8	9.8	9.8
	No	47	77.0	77.0	86.9
	MISSING	8	13.1	13.1	100.0
	Total	61	100.0	100.0	

Veterans payments

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	4	6.6	6.6	6.6
	No	47	77.0	77.0	83.6
	MISSING	10	16.4	16.4	100.0
	Total	61	100.0	100.0	

Other public assistance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	2	3.3	3.3	3.3
	No	49	80.3	80.3	83.6
	DK	1	1.6	1.6	85.2
	MISSING	9	14.8	14.8	100.0
	Total	61	100.0	100.0	

Household income in 1997

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than \$10,000	9	14.8	14.8	14.8
	\$10,000-14,999	6	9.8	9.8	24.6
	\$15,000-19,999	7	11.5	11.5	36.1
	\$20,000-34,999	8	13.1	13.1	49.2
	\$35,000-49,999	13	21.3	21.3	70.5
	\$50,000-99,999	13	21.3	21.3	91.8
	More than \$100,000	1	1.6	1.6	93.4
	DK	2	3.3	3.3	96.7
	MISSING	2	3.3	3.3	100.0
	Total	61	100.0	100.0	

Age of respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 to 24 Years	1	1.6	1.8	1.8
	25 to 34 Years	7	11.5	12.7	14.5
	35 to 44 Years	10	16.4	18.2	32.7
	45 to 64 Years	34	55.7	61.8	94.5
	65 Years and Over	3	4.9	5.5	100.0
	Total	55	90.2	100.0	
Missing	System	6	9.8		
Total		61	100.0		

Appendix L

Crime Analysis Models

Gambling and Crime in Montana

Methodological Appendix

In order to address the question of whether gambling affects crime, a multiple regression analysis was carried out using Montana counties as the unit of analysis. Equations were estimated for an index of violent crime, and index of property crime, and 24 separate crime categories. A number of variables that have been shown to be related to crime in other research were introduced as controls.

Data were compiled from a variety of sources: the Board of Crime Control of the Montana Department of Justice, the U.S. Census Bureau, the University of Montana Institute for Tourism and Recreation Research, and the Montana Gambling Control Division of the Montana Department of Justice. The table below shows the minimum, maximum, mean, and standard deviation for each of the variables used in this analysis.

Independent Variable

The independent variable in this analysis is 1995 video gambling machine (VGM) tax revenues per capita, designed to be a measure of gambling activity in a local area. VGM tax revenues per capita is calculated by dividing the 1995 VGM taxes generated in a county by the 1995 resident population of that county. While the lottery and other forms of gambling generate some tax revenue, VGM taxes constitute the vast majority of such revenue.

Dependent Variables

The dependent variables were rates of various categories of crime. These crime rates were calculated from Montana Board of Crime Control data based on crimes known to the authorities and provided to the Board by local law enforcement agencies under the Montana Uniform Crime Reporting (MUCR) system.

The MUCR data are problematic for a number of reasons. Many crimes never become known to Montana law enforcement authorities because they are never reported or never otherwise come to their attention. Based on surveys of crime victims, the U.S. Department of Justice estimates that nationally more than 60% of crimes never become known to the police.

It is unclear to what extent crimes committed on Montana Indian reservations (especially by tribal members) are recorded in the MUCR data rather than in tribal police reports to the Bureau of Indian Affairs. Neither analysts from the Board of Crime Control, nor law enforcement officials with the federal Bureau of Indian Affairs, nor local tribal police officials had an accurate picture of how serious a problem this is.

Participation in the MUCR system is voluntary. Consequently, a significant number of Montana law enforcement agencies provide the Board of Crime Control with no crime data or with incomplete crime data. However, according to the Montana Board of Crime Control, nearly 80% of Montana law enforcement agencies (with jurisdiction over about 95% of the population) do participate in the MUCR system.

Crime rates per 100,000 were calculated by dividing the number of crimes reported to authorities in an area by the number of residents in that area multiplied by 100,000. In order to derive more reliable crime rate estimates and to minimize the

effect of year-to-year fluctuations, three-year average rates (1994, 1995, 1996) were calculated for the 46 Montana counties where such data were available.

Control Variables

Down through the years it has been shown that crime rates are correlated with a variety of characteristics of counties. For example, areas with a higher than average proportion of young males tend to have relatively high rates of certain types of crime since young males are disproportionately the perpetrators and victims of these crimes. A number of variables were introduced into the regression models as control variables to take into account such characteristics. This procedure allows us to examine the impact of migration on crime net of other characteristics of Montana counties.

Control variables include: the ratio of males to females; the percentage of the population aged 18-24; the percentage of the population that is Native American, Hispanic, or Black; the unemployment rate; the median income; per capita bed tax revenue; the percent change in population between 1990 and 1997; and the size of the population in 1995.

The male/female ratio and the percent aged 18 to 24 were used as control variables because of the disproportionate crime involvement of males and young persons. Likewise, it has been found that minority persons are often more likely than nonminorities to be the victim of or perpetrators of some crimes. The unemployment rate and median income are measures of economic well being which tends to be correlated with crime. Per capita bed tax is a rough measure of the extent to which a county relies on tourism. Tourist areas tend to have inflated crime rates since the number of persons present in the area (and potentially subject to criminal victimization) is higher than is reflected in the resident population base which is used to calculate crime rates. Percent change in population and population size were introduced as control variables because previous research has found that rapid changes in population may be correlated with crime and that areas with larger population tend to have higher crime rates.

Procedures

Twenty six regression equations were estimated corresponding to the violent crime index, the property crime index, and the 24 separate crime categories: murder and nonnegligent homicide, forcible rape, robbery, aggravated assault, burglary, larceny-theft, motor vehicle theft, arson, simple assault, domestic abuse, forgery, fraud, embezzlement, stolen property, vandalism, weapons offenses, prostitution, sexual offenses, drug offenses, illegal gambling, family offenses, driving under the influence, liquor violations, and disorderly conduct. Multicollinearity checks were carried out and the models refined accordingly. A t-test was used to determine which coefficients were statistically significant at the .05 level. R square and adjusted R square were calculated to measure the explanatory power of each equation. The regression models are presented below.

Offense Categories

Murder and nonnegligent manslaughter

The willful (nonnegligent) killing of one human being by another. Deaths caused by negligence, attempts to kill, assaults to kill, suicides, accidental deaths, and justifiable homicides are excluded.

Forcible rape

The carnal knowledge of a female forcibly and against her will. Included are rapes by force and attempts or assaults to rape. Statutory offenses (no force used victim under age of consent) are excluded.

Robbery

The taking or attempting to take anything of value from the care, custody, or control of a person or persons by force or threat of force or violence and/or by putting the victim in fear.

Aggravated assault

An unlawful attack by one person upon another for the purpose of inflicting severe or aggravated bodily injury. This type of assault usually is accompanied by the use of a weapon or by means likely to produce death or great bodily harm. Simple assaults are excluded.

Burglary-breaking or entering

The unlawful entry of a structure to commit a felony or a theft. Attempted forcible entry is included.

Larceny-theft (except motor vehicle theft) The unlawful taking, carrying, leading, or riding away of property from the possession or constructive possession of another. Examples are thefts of bicycles or automobile accessories, shoplifting, pocket-picking, or the stealing of any property or article which is not taken by force and violence or by fraud. Attempted larcenies are included. Embezzlement, confidence games, forgery, worthless checks, etc., are excluded.

Motor vehicle theft

The theft or attempted theft of a motor vehicle. A motor vehicle is self-propelled and runs on the surface and not on rails. Specifically excluded from this category are motorboats, construction equipment, airplanes, and farming equipment.

Arson

Any willful or malicious burning or attempt to burn, with or without intent to defraud, a dwelling house, public building, motor vehicle or aircraft, personal property of another, etc.

Simple assaults

Assaults and attempted assaults where no weapon is used and which do not result in serious or aggravated injury to the victim.

Forgery and counterfeiting

Making, altering, uttering, or possessing, with intent to defraud, anything false in the semblance of that which is true. Attempts are included.

Fraud

Fraudulent conversion and obtaining money or property by false pretenses. Included are confidence games and bad checks, except forgeries and counterfeiting.

Embezzlement

Misappropriation or misapplication of money or property entrusted to one's care, custody, or control.

Stolen property: buying, receiving, possessing

Buying, receiving, and possessing stolen property, including attempts.

Vandalism

Willful or malicious destruction, injury, disfigurement, or defacement of any public or private property, real or personal, without consent of the owner or persons having custody or control.

Weapons: carrying, possessing, etc.

All violations of regulations or statutes controlling the carrying, using, possessing, furnishing, and manufacturing of deadly weapons or silencers. Included are attempts.

Prostitution and commercialized vice

Sex offenses of a commercialized nature, such as prostitution, keeping a bawdy house, procuring, or transporting women for immoral purposes. Attempts are included.

Sex offenses (except forcible rape, prostitution, and commercialized vice)

Statutory rape and offenses against chastity, common decency, morals, and the like. Attempts are included.

Drug abuse violations

State and/or local offenses relating to the unlawful possession, sale, use, growing, and manufacturing of narcotic drugs. The following drug categories are specified: opium or cocaine and their derivatives (morphine, heroin, codeine); marijuana; synthetic narcotics and manufactured narcotics that can cause true addiction (demerol, methadone); and dangerous nonnarcotic drugs (barbiturates, benzedrine).

Gambling

Promoting, permitting, or engaging in illegal gambling.

Offenses against the family and children

Nonsupport, neglect, desertion, or abuse of family and children.

Driving under the influence

Driving or operating any vehicle or common carrier while drunk or under the influence of liquor or narcotics.

Liquor laws

State and/or local liquor law violations, except drunkenness and driving under the influence. Federal violations are excluded.

Disorderly conduct

Breach of the peace.

Variables

	Minimum	Maximum	Mean	Std. Deviation
Gambling Tax Revenue per Capita 1995	.88	68.30	20.7612	10.6997
Mean Index Violent Crime Rate	.00	503.59	159.2785	102.5657
Mean Index Property Crime Rate	112.49	7173.16	2990.5164	1890.7754
Mean Homicide Rate	.00	14.15	2.5132	3.7854
Mean Rape Rate	.00	92.10	14.5494	18.2569
Mean Robbery Rate	.00	72.71	12.7938	18.0757
Mean Aggravated Assault Rate	.00	488.83	129.4222	90.6679
Mean Burglary Rate	15.26	1291.67	496.6036	310.1222
Mean Lacey Rate	45.26	6028.74	2300.2674	1598.4883
Mean Motor Vehicle Theft Rate	.00	439.94	193.6453	109.8230
Mean Arson Rate	.00	98.43	20.4112	21.8948
Mean Simple Assault Rate	.00	2192.88	766.5578	586.1624
Mean Domestic Abuse Rate	.00	794.71	279.2245	224.0956
Mean Forgery Rate	.00	509.96	110.7155	114.2767
Mean Fraud Rate	.00	1119.76	209.6452	229.1776
Mean Embezzlement Rate	.00	23.77	3.4504	5.8783
Mean Stolen Property Rate	.00	1184.48	67.6943	175.3740
Mean Vandalism Rate	.00	2985.91	1547.5616	819.1287
Mean Weapons Offense Rate	.00	382.78	58.8680	83.8548
Mean Prostitution Rate	.00	32.38	1.7015	5.7853
Mean Sex Offense Rate	.00	387.69	122.4735	98.1840
Mean Drug Offense Rate	.00	2027.92	320.3000	346.5050
Mean Gambling Offense Rate	.00	14.34	.7269	2.4483
Mean Family Offense Rate	.00	432.03	105.1258	101.8913
Mean DUI Rate	.00	2080.09	696.6506	439.1752
Mean Liquor Offense Rate	.00	1629.20	542.9058	396.6114
Mean Disorderly Conduct Rate	37.83	7842.20	807.5557	1257.3021
Ratio of Males to Females 1995	.941	1.481	1.01555	8.0177E-02
Percent Age 18-24 in 1995	.0450	.1933	7.58493E-02	2.60096E-02
Percent Hispanic in 1995	.0021	.0407	1.39939E-02	8.16564E-03
Percent Black in 1995	.0000	.0223	2.20752E-03	4.05634E-03
Percent Indian in 1995	.0028	.5707	5.67418E-02	.110247
Percentage Population Change 90-97	-10.60	24.40	5.3370	9.5759
Census Population 1995	849	124699	17502.59	26385.10

Dependent Variable: Mean Violent Crime Index Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	233.752	214.852		1.088	.284
	Gambling Tax Revenue per Capita 1995	2.875	1.695	.300	1.696	.099
	Bed Tax per Capita 1995	-5.274	2.803	-.324	-1.882	.068
	Ratio of Males to Females 1995	-97.913	176.724	-.077	-.554	.583
	Percent Unemployed 1995	4.347	7.396	.129	.588	.561
	Median Household Income 1993	-4.41E-03	.005	-.143	-.917	.366
	Percent Age 18-24 in 1995	746.229	735.398	.189	1.015	.317
	Percent Hispanic in 1995	851.361	2030.811	.068	.419	.678
	Percent Black in 1995	-3232.731	4125.768	-.128	-.784	.439
	Percent Indian in 1995	42.076	156.887	.045	.268	.790
	Percentage Population Change 90-97	4.734	1.739	.442	2.723	.010
	Census Population 1995	2.650E-04	.001	.068	.357	.724

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.674	.455	.278	87.1495

Dependent Variable: Mean Property Crime Index Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2635.788	2706.165		.974	.337
	Gambling Tax Revenue per Capita 1995	63.557	21.347	.360	2.977	.005
	Bed Tax per Capita 1995	38.269	35.304	.128	1.084	.286
	Ratio of Males to Females 1995	-451.919	2225.923	-.019	-.203	.840
	Percent Unemployed 1995	75.463	93.155	.121	.810	.424
	Median Household Income 1993	-8.55E-02	.061	-.151	-1.409	.168
	Percent Age 18-24 in 1995	7517.207	9262.711	.103	.812	.423
	Percent Hispanic in 1995	-21595.8	25579.079	-.093	-.844	.404
	Percent Black in 1995	24191.439	51966.117	.052	.466	.645
	Percent Indian in 1995	-196.583	1976.073	-.011	-.099	.921
	Percentage Population Change 90-97	-8.850	21.900	-.045	-.404	.689
	Census Population 1995	4.190E-02	.009	.585	4.477	.000

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.863	.745	.663	1097.6919

Dependent Variable: Mean Arson Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	41.926	53.228		.788	.436
	Gambling Tax Revenue per Capita 1995	-.243	.420	-.119	-.579	.567
	Bed Tax per Capita 1995	.173	.694	.050	.250	.804
	Ratio of Males to Females 1995	-10.711	43.782	-.039	-.245	.808
	Percent Unemployed 1995	2.645	1.832	.366	1.443	.158
	Median Household Income 1993	-5.32E-04	.001	-.081	-.446	.658
	Percent Age 18-24 in 1995	-.83.067	182.189	-.099	-.456	.651
	Percent Hispanic in 1995	-698.071	503.116	-.260	-1.387	.174
	Percent Black in 1995	219.093	1022.124	.041	.214	.832
	Percent Indian in 1995	14.487	38.867	.073	.373	.712
	Percentage Population Change 90-97	.141	.431	.062	.327	.746
	Census Population 1995	2.952E-04	.000	.356	1.604	.118

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.515	.265	.028	21.5905

Dependent Variable: Mean Aggravated Assault Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	363.958	199.104		1.828	.076
	Gambling Tax Revenue per Capita 1995	1.619	1.571	.191	1.031	.310
	Bed Tax per Capita 1995	-5.121	2.597	-.356	-1.972	.057
	Ratio of Males to Females 1995	-160.062	163.771	-.142	-.977	.335
	Percent Unemployed 1995	4.594	6.854	.154	.670	.507
	Median Household Income 1993	-6.73E-03	.004	-.247	-1.508	.141
	Percent Age 18-24 in 1995	865.594	681.497	.248	1.270	.213
	Percent Hispanic in 1995	500.407	1881.961	.045	.266	.792
	Percent Black in 1995	-2633.999	3823.367	-.118	-.689	.496
	Percent Indian in 1995	1.233	145.388	.001	.008	.993
	Percentage Population Change 90-97	3.952	1.611	.417	2.453	.019
	Census Population 1995	-4.07E-04	.001	-.119	-.592	.558

Model Summary

Model	R	R Square	Adjusted R Square	Std Error of the Estimate
1	.633	.401	.207	80.7618

Dependent Variable: Mean Burglary Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1028.949	581.469		1.770	.086
	Gambling Tax Revenue per Capita 1995	11.308	4.587	.390	2.465	.019
	Bed Tax per Capita 1995	-.126	7.586	-.003	-.017	.987
	Ratio of Males to Females 1995	263.445	478.280	.068	.551	.585
	Percent Unemployed 1995	10.892	20.016	.107	.544	.590
	Median Household Income 1993	-4.01E-02	.013	-.431	-3.080	.004
	Percent Age 18-24 in 1995	-1165.433	1990.262	-.098	-.586	.562
	Percent Hispanic in 1995	-4066.099	5496.131	-.107	-.740	.464
	Percent Black in 1995	3028.244	11165.867	.040	.271	.788
	Percent Indian in 1995	-312.841	424.595	-.111	-.737	.466
	Percentage Population Change 90-97	5.623	4.706	.174	1.195	.240
	Census Population 1995	4.499E-03	.002	.383	2.237	.032

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.750	.563	.422	235.8591

Dependent Variable: Mean Disorderly Conduct Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2277.804	3079.080		.740	.465
	Gambling Tax Revenue per Capita 1995	33.434	24.289	.285	1.377	.178
	Bed Tax per Capita 1995	-47.654	40.169	-.239	-1.186	.244
	Ratio of Males to Females 1995	-1052.577	2532.660	-.067	-.416	.680
	Percent Unemployed 1995	13.844	105.992	.033	.131	.897
	Median Household Income 1993	-7.53E-02	.069	-.200	-1.091	.283
	Percent Age 18-24 in 1995	11022.757	10539.134	.228	1.046	.303
	Percent Hispanic in 1995	17330.761	29103.934	.113	.595	.555
	Percent Black in 1995	-13460.9	59127.164	-.043	-.228	.821
	Percent Indian in 1995	154.066	2248.380	.014	.069	.946
	Percentage Population Change 90-97	-18.583	24.918	-.142	-.746	.461
	Census Population 1995	1.073E-02	.011	.225	1.007	.321

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.504	.254	.013	1248.9563

Dependent Variable: Mean Domestic Abuse Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	552.694	460.033		1.201	.238
	Gambling Tax Revenue per Capita 1995	-1.748	3.629	-.083	-.482	.633
	Bed Tax per Capita 1995	4.894	6.001	.138	.815	.421
	Ratio of Males to Females 1995	-735.906	378.394	-.263	-1.945	.060
	Percent Unemployed 1995	48.612	15.836	.658	3.070	.004
	Median Household Income 1993	5.835E-03	.010	.087	.566	.575
	Percent Age 18-24 in 1995	338.747	1574.609	.039	.215	.831
	Percent Hispanic in 1995	887.753	4348.299	.032	.204	.839
	Percent Black in 1995	-5244.301	8833.947	-.095	-.594	.557
	Percent Indian in 1995	-627.450	335.921	-.309	-1.868	.070
	Percentage Population Change 90-97	-3.811	3.723	-.163	-1.024	.313
	Census Population 1995	3.320E-03	.002	.391	2.086	.045

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.690	.476	.307	186.6014

Dependent Variable: Mean Driving Under the Influence Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1071.471	1046.261		1.024	.313
	Gambling Tax Revenue per Capita 1995	16.890	8.253	.411	2.046	.049
	Bed Tax per Capita 1995	16.331	13.649	.234	1.196	.240
	Ratio of Males to Females 1995	315.108	860.589	.058	.366	.717
	Percent Unemployed 1995	-40.809	36.016	-.282	-1.133	.265
	Median Household Income 1993	-2.87E-02	.023	-.218	-1.225	.229
	Percent Age 18-24 in 1995	-3624.186	3581.162	-.215	-1.012	.319
	Percent Hispanic in 1995	-762.977	9889.419	-.014	-.077	.939
	Percent Black in 1995	-9703.910	20091.213	-.090	-.483	.632
	Percent Indian in 1995	1954.086	763.992	.491	2.558	.015
	Percentage Population Change 90-97	.4161	8.467	.091	.491	.626
	Census Population 1995	3.384E-04	.004	.020	.094	.926

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.543	.294	.066	424.3912

Dependent Variable: Mean Drug Offenses Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	99.017	903.353		.110	.913
	Gambling Tax Revenue per Capita 1995	4.310	7.126	.133	.605	.549
	Bed Tax per Capita 1995	6.706	11.785	.122	.569	.573
	Ratio of Males to Females 1995	-380.163	743.042	-.088	-.512	.612
	Percent Unemployed 1995	20.218	31.096	.177	.650	.520
	Median Household Income 1993	1.248E-02	.020	.120	.616	.542
	Percent Age 18-24 in 1995	707.939	3092.014	.053	.229	.820
	Percent Hispanic in 1995	-726.607	8538.630	-.017	-.085	.933
	Percent Black in 1995	-12004.4	17346.967	-.141	-.692	.494
	Percent Indian in 1995	-216.508	659.639	-.069	-.328	.745
	Percentage Population Change 90-97	-2.333	7.311	-.064	-.319	.752
	Census Population 1995	1.572E-03	.003	.120	.503	.618

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.394	.155	-.118	366.4239

Dependent Variable: Mean Embezzlement Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.046	14.457		.557	.581
	Gambling Tax Revenue per Capita 1995	-1.26E-02	.114	-.023	-.111	.912
	Bed Tax per Capita 1995	-3.42E-02	.189	-.037	-.181	.857
	Ratio of Males to Females 1995	-14.024	11.891	-.191	-1.179	.246
	Percent Unemployed 1995	.309	.498	.160	.622	.538
	Median Household Income 1993	1.292E-04	.000	.073	.399	.693
	Percent Age 18-24 in 1995	78.086	49.482	.346	1.578	.124
	Percent Hispanic in 1995	-91.771	136.645	-.127	-.672	.506
	Percent Black in 1995	400.699	277.607	.277	1.443	.158
	Percent Indian in 1995	-15.820	10.556	-.297	-1.499	.143
	Percentage Population Change 90-97	7.418E-02	.117	.121	.634	.530
	Census Population 1995	-6.11E-06	.000	-.027	-.122	.904

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.498	.248	.005	5.8639

Dependent Variable: Mean Family Offenses Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.903	222.399		.049	.961
	Gambling Tax Revenue per Capita 1995	1.223	1.754	.128	.697	.490
	Bed Tax per Capita 1995	-3.878	2.901	-.240	-1.337	.190
	Ratio of Males to Females 1995	-127.993	182.932	-.101	-.700	.489
	Percent Unemployed 1995	6.968	7.656	.207	.910	.369
	Median Household Income 1993	5.674E-03	.005	.186	1.138	.263
	Percent Age 18-24 in 1995	970.620	761.231	.248	1.275	.211
	Percent Hispanic in 1995	-4342.508	2102.149	-.348	-2.066	.047
	Percent Black in 1995	-282.622	4270.697	-.011	-.066	.948
	Percent Indian in 1995	-65.656	162.398	-.071	-.404	.689
	Percentage Population Change 90-97	2.181	1.800	.205	1.212	.234
	Census Population 1995	9.552E-04	.001	.247	1.242	.223

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.639	.408	.216	90.2109

Dependent Variable: Mean Forgery Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	19.975	132.957		.150	.881
	Gambling Tax Revenue per Capita 1995	.832	1.049	.078	.794	.433
	Bed Tax per Capita 1995	3.501	1.735	.193	2.018	.052
	Ratio of Males to Females 1995	-63.749	109.362	-.045	-.583	.564
	Percent Unemployed 1995	1.318	4.577	.035	.288	.775
	Median Household Income 1993	-6.89E-04	.003	-.020	-.231	.819
	Percent Age 18-24 in 1995	1096.521	455.089	.250	2.409	.022
	Percent Hispanic in 1995	-470.236	1256.733	-.034	-.374	.711
	Percent Black in 1995	489.080	2553.163	.017	.192	.849
	Percent Indian in 1995	10.103	97.087	.010	.104	.918
	Percentage Population Change 90-97	-.832	1.076	-.070	-.773	.445
	Census Population 1995	2.781E-03	.000	.642	6.048	.000

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.912	.832	.777	53.9310

Dependent Variable: Mean Fraud Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	104.218	558.605		.187	.853
	Gambling Tax Revenue per Capita 1995	-.523	4.406	-.024	-.119	.906
	Bed Tax per Capita 1995	2.168	7.287	.060	.297	.768
	Ratio of Males to Females 1995	-371.818	459.474	-.130	-.809	.424
	Percent Unemployed 1995	28.072	19.229	.372	1.460	.154
	Median Household Income 1993	9.084E-03	.013	.132	.726	.473
	Percent Age 18-24 in 1995	1516.418	1912.005	.172	.793	.433
	Percent Hispanic in 1995	1082.512	5280.023	.039	.205	.839
	Percent Black in 1995	-10869.6	10726.824	-.192	-1.013	.318
	Percent Indian in 1995	-551.135	407.900	-.265	-1.351	.186
	Percentage Population Change 90-97	-7.967	4.521	-.333	-1.762	.087
	Census Population 1995	2.206E-03	.002	.254	1.142	.261

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.511	.261	.022	226.5851

Dependent Variable: Mean Illegal Gambling Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-25.414	4.505		-5.641	.000
	Gambling Tax Revenue per Capita 1995	1.763E-02	.036	.077	.496	.623
	Bed Tax per Capita 1995	2.147E-02	.059	.055	.365	.717
	Ratio of Males to Females 1995	24.615	3.706	.806	6.642	.000
	Percent Unemployed 1995	-7.04E-02	.155	-.087	-.454	.653
	Median Household Income 1993	6.944E-05	.000	.095	.688	.496
	Percent Age 18-24 in 1995	-14.992	15.421	-.159	-.972	.338
	Percent Hispanic in 1995	-.411	42.586	-.014	-.097	.924
	Percent Black in 1995	40.191	86.517	.067	.465	.645
	Percent Indian in 1995	3.833	3.290	.173	1.165	.252
	Percentage Population Change 90-97	-3.01E-02	.036	-.118	-.824	.416
	Census Population 1995	1.556E-05	.000	.168	.998	.325

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.761	.579	.443	1.8275

Dependent Variable: Mean Larceny-Theft Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1382.183	2218.865		.623	.537
	Gambling Tax Revenue per Capita 1995	51.906	17.503	.347	2.965	.005
	Bed Tax per Capita 1995	38.154	28.947	.150	1.318	.196
	Ratio of Males to Females 1995	-506.437	1825.100	-.025	-.277	.783
	Percent Unemployed 1995	47.807	76.380	.091	.626	.536
	Median Household Income 1993	-4.65E-02	.050	-.097	-.936	.356
	Percent Age 18-24 in 1995	8071.463	7594.773	.131	1.063	.295
	Percent Hispanic in 1995	-14687.8	20973.049	-.075	-.700	.488
	Percent Black in 1995	19538.405	42608.567	.050	.459	.649
	Percent Indian in 1995	186.306	1620.241	.013	.115	.909
	Percentage Population Change 90-97	-13.842	17.956	-.083	-.771	.446
	Census Population 1995	3.534E-02	.008	.583	4.605	.000

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.872	.760	.683	900.0303

Dependent Variable: Mean Liquor Offenses Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1045.202	1015.891		1.029	.311
	Gambling Tax Revenue per Capita 1995	2.939	8.014	.079	.367	.716
	Bed Tax per Capita 1995	16.074	13.253	.255	1.213	.234
	Ratio of Males to Females 1995	-409.998	835.608	-.083	-.491	.627
	Percent Unemployed 1995	8.840	34.970	.068	.253	.802
	Median Household Income 1993	-8.32E-03	.023	-.070	-.365	.717
	Percent Age 18-24 in 1995	1763.708	3477.210	.116	.507	.615
	Percent Hispanic in 1995	-14288.1	9602.353	-.294	-1.488	.146
	Percent Black in 1995	5718.013	19508.012	.058	.293	.771
	Percent Indian in 1995	288.356	741.815	.080	.389	.700
	Percentage Population Change 90-97	-7.575	8.221	-.183	-.921	.363
	Census Population 1995	-1.32E-03	.004	-.088	-.377	.709

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.429	.184	-.079	412.0721

Dependent Variable: Mean Motor Vehicle Theft Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	224.657	213.774		1.051	.301
	Gambling Tax Revenue per Capita 1995	.343	1.686	.033	.203	.840
	Bed Tax per Capita 1995	.241	2.789	.014	.086	.932
	Ratio of Males to Females 1995	-208.927	175.837	-.153	-1.188	.243
	Percent Unemployed 1995	16.765	7.359	.463	2.278	.029
	Median Household Income 1993	1.234E-03	.005	.037	.258	.798
	Percent Age 18-24 in 1995	611.177	731.708	.145	.835	.409
	Percent Hispanic in 1995	-2841.925	2020.621	-.211	-1.406	.169
	Percent Black in 1995	1624.791	4105.066	.060	.396	.695
	Percent Indian in 1995	-70.048	156.100	-.070	-.449	.656
	Percentage Population Change 90-97	-.631	1.730	-.055	-.365	.717
	Census Population 1995	2.069E-03	.001	.497	2.799	.008

Model Summary

Model	R	R Square	Adjusted R Square	Std Error of the Estimate
1	.727	.529	.377	86.7122

Dependent Variable: Mean Murder Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-28.962	7.504		-3.860	.000
	Gambling Tax Revenue per Capita 1995	3.076E-02	.059	.087	.520	.607
	Bed Tax per Capita 1995	-.137	.098	-.228	-1.397	.171
	Ratio of Males to Females 1995	22.215	6.172	.471	3.599	.001
	Percent Unemployed 1995	.132	.258	.106	.510	.613
	Median Household Income 1993	3.521E-04	.000	.310	2.094	.044
	Percent Age 18-24 in 1995	-24.974	25.684	-.172	-.972	.338
	Percent Hispanic in 1995	11.128	70.927	.024	.157	.876
	Percent Black in 1995	-79.341	144.095	-.085	-.551	.585
	Percent Indian in 1995	-3.156	5.479	-.092	-.576	.568
	Percentage Population Change 90-97	9.768E-02	.061	.247	1.609	.117
	Census Population 1995	4.801E-05	.000	.335	1.850	.073

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.715	.511	.353	3.0438

Dependent Variable: Mean Prostitution Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.660	14.278		-.116	.908
	Gambling Tax Revenue per Capita 1995	-2.83E-02	.113	-.052	-.251	.803
	Bed Tax per Capita 1995	-2.22E-02	.186	-.024	-.119	.906
	Ratio of Males to Females 1995	5.048	11.744	.070	.430	.670
	Percent Unemployed 1995	-.240	.491	-.126	-.488	.629
	Median Household Income 1993	7.120E-05	.000	.041	.223	.825
	Percent Age 18-24 in 1995	-49.575	48.870	-.223	-1.014	.318
	Percent Hispanic in 1995	122.903	134.956	.173	.911	.369
	Percent Black in 1995	-345.770	274.175	-.242	-1.261	.216
	Percent Indian in 1995	.186	10.426	.004	.018	.986
	Percentage Population Change 90-97	-.154	.116	-.256	-1.336	.190
	Census Population 1995	1.246E-04	.000	.568	2.524	.016

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.493	.243	-.002	5.7915

Dependent Variable: Mean Rape Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-59.531	38.172		-1.560	.128
	Gambling Tax Revenue per Capita 1995	.225	.301	.132	.748	.460
	Bed Tax per Capita 1995	.344	.498	.119	.691	.494
	Ratio of Males to Females 1995	19.471	31.398	.086	.620	.539
	Percent Unemployed 1995	.568	1.314	.094	.432	.669
	Median Household Income 1993	1.697E-03	.001	.310	1.984	.055
	Percent Age 18-24 in 1995	-116.232	130.655	-.166	-.890	.380
	Percent Hispanic in 1995	47.771	360.806	.021	.132	.895
	Percent Black in 1995	-479.060	733.009	-.106	-.654	.518
	Percent Indian in 1995	27.067	27.874	.163	.971	.338
	Percentage Population Change 90-97	.259	.309	.136	.840	.407
	Census Population 1995	3.144E-04	.000	.454	2.381	.023

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.676	.457	.281	15.4835

Dependent Variable: Mean Robbery Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-41.713	25.909		-1.610	.117
	Gambling Tax Revenue per Capita 1995	1.000	.204	.592	4.894	.000
	Bed Tax per Capita 1995	-.360	.338	-.126	-1.065	.294
	Ratio of Males to Females 1995	20.462	21.311	.091	.960	.344
	Percent Unemployed 1995	-.947	.892	-.159	-1.062	.296
	Median Household Income 1993	2.675E-04	.001	.049	.461	.648
	Percent Age 18-24 in 1995	21.841	88.683	.031	.246	.807
	Percent Hispanic in 1995	292.056	244.898	.132	1.193	.241
	Percent Black in 1995	-40.332	497.532	-.009	-.081	.936
	Percent Indian in 1995	16.932	18.919	.103	.895	.377
	Percentage Population Change 90-97	.425	.210	.225	2.028	.050
	Census Population 1995	3.100E-04	.000	.453	3.460	.001

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.863	.745	.662	10.5095

Dependent Variable: Mean Sex Offenses Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	121.946	190.489		.640	.526
	Gambling Tax Revenue per Capita 1995	.282	1.503	.031	.188	.852
	Bed Tax per Capita 1995	-.360	2.485	-.023	-.145	.886
	Ratio of Males to Females 1995	-.212.371	156.684	-.173	-1.355	.184
	Percent Unemployed 1995	22.885	6.557	.707	3.490	.001
	Median Household Income 1993	3.018E-03	.004	.102	.707	.485
	Percent Age 18-24 in 1995	473.071	652.009	.125	.726	.473
	Percent Hispanic in 1995	-2983.863	1800.531	-.248	-1.657	.107
	Percent Black in 1995	399.059	3657.934	.016	.109	.914
	Percent Indian in 1995	-.284.606	139.097	-.320	-2.046	.049
	Percentage Population Change 90-97	.500	1.542	.049	.324	.748
	Census Population 1995	8.410E-04	.001	.226	1.276	.210

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.729	.532	.381	77.2674

Dependent Variable: Mean Simple Assault Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	293.574	1052.768		.279	.782
	Gambling Tax Revenue per Capita 1995	3.860	8.305	.070	.465	.645
	Bed Tax per Capita 1995	5.778	13.734	.062	.421	.677
	Ratio of Males to Females 1995	-1117.328	865.941	-.153	-1.290	.206
	Percent Unemployed 1995	152.109	36.240	.787	4.197	.000
	Median Household Income 1993	1.507E-02	.024	.086	.639	.527
	Percent Age 18-24 in 1995	3692.864	3603.434	.164	1.025	.313
	Percent Hispanic in 1995	-5646.660	9950.922	-.079	-.567	.574
	Percent Black in 1995	6457.934	20216.160	.045	.319	.751
	Percent Indian in 1995	-1528.193	768.743	-.287	-1.988	.055
	Percentage Population Change 90-97	-10.515	8.520	-.172	-1.234	.226
	Census Population 1995	5.839E-03	.004	.263	1.604	.118

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.774	.599	.469	427.0305

Dependent Variable: Mean Stolen Property Rate

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	363.124	305.035		1.190	.242
	Gambling Tax Revenue per Capita 1995	1.143	2.406	.070	.475	.638
	Bed Tax per Capita 1995	-1.198	3.979	-.043	-.301	.765
	Ratio of Males to Females 1995	-126.396	250.903	-.058	-.504	.618
	Percent Unemployed 1995	-12.130	10.500	-.210	-1.155	.256
	Median Household Income 1993	-6.78E-03	.007	-.129	-.991	.329
	Percent Age 18-24 in 1995	-154.075	1044.081	-.023	-.148	.884
	Percent Hispanic in 1995	2328.343	2883.241	.108	.808	.425
	Percent Black in 1995	31046.513	5857.554	.718	5.300	.000
	Percent Indian in 1995	103.662	222.740	.065	.465	.645
	Percentage Population Change 90-97	2.841	2.469	.155	1.151	.258
	Census Population 1995	-2.40E-03	.001	-.360	-2.270	.030

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.790	.624	.502	123.7304

Dependent Variable: Mean Vandalism Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3603.178	1655.674		2.176	.037
	Gambling Tax Revenue per Capita 1995	28.603	13.061	.374	2.190	.035
	Bed Tax per Capita 1995	11.640	21.600	.090	.539	.593
	Ratio of Males to Females 1995	-1147.252	1361.854	-.112	-.842	.405
	Percent Unemployed 1995	17.780	56.994	.066	.312	.757
	Median Household Income 1993	-7.80E-02	.037	-.317	-2.101	.043
	Percent Age 18-24 in 1995	6615.869	5667.072	.210	1.167	.251
	Percent Hispanic in 1995	-18564.5	15649.682	-.185	-1.186	.244
	Percent Black in 1995	29884.045	31793.685	.148	.940	.354
	Percent Indian in 1995	-533.230	1208.992	-.072	-.441	.662
	Percentage Population Change 90-97	-12.197	13.399	-.143	-.910	.369
	Census Population 1995	8.706E-03	.006	.280	1.520	.138

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.702	.492	.328	671.5851

Dependent Variable: Mean Weapons Offenses Rate per 100,000

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.403	148.399		.057	.955
	Gambling Tax Revenue per Capita 1995	4.341	1.171	.554	3.708	.001
	Bed Tax per Capita 1995	1.473	1.936	.111	.761	.452
	Ratio of Males to Females 1995	39.237	122.064	.038	.321	.750
	Percent Unemployed 1995	-.976	5.108	-.035	-.191	.850
	Median Household Income 1993	-2.16E-03	.003	-.086	-.650	.520
	Percent Age 18-24 in 1995	-1209.329	507.942	-.375	-2.381	.023
	Percent Hispanic in 1995	2814.374	1402.687	.274	2.006	.053
	Percent Black in 1995	-5373.235	2849.681	-.260	-1.886	.068
	Percent Indian in 1995	123.827	108.362	.163	1.143	.261
	Percentage Population Change 90-97	.164	1.201	.019	.137	.892
	Census Population 1995	1.626E-03	.001	.512	3.169	.003

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.781	.611	.485	60.1944

Appendix M

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Household Survey Hypothesis Tests

Problem and Pathological Gambling Prevalence in Montana Household Surveys

Problem Gambling Screen	Household Prevalence 1992 (%) (N=1020)	95% Conf. Level (%)	Household Prevalence 1998 (%) (N=1227)	95% Conf. Level (%)
SOGS Lifetime Problem	2.3	± 0.9	2.9	± 0.9
SOGS Lifetime Pathological	1.3	± 0.7	2.8	± 0.9
SOGS-Current Problem	1.5	± 0.7	2.0	± 0.8
SOGS Current Pathological	0.7	± 0.5	1.6	± 0.7
DSM-IV Problem			1.6	± 0.7
DSM-IV Pathological			1.0	± 0.5

Crosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Mental status * GAMCLASS	1223	99.7%	4	.3%	1227	100.0%
Gender of respondent * GAMCLASS	1228	100.0%	0	.0%	1227	100.0%
Age of respondent * GAMCLASS	1228	100.0%	0	.0%	1227	100.0%
Composite Race * GAMCLASS	1212	98.8%	15	1.2%	1227	100.0%
Household income * GAMCLASS	1224	99.8%	3	.2%	1227	100.0%
EDUCCPS * GAMCLASS	1224	99.8%	3	.2%	1227	100.0%

Marital status * GAMCLASS

Crosstab

Count

		GAMCLASS				Total
		Non-Gamblers	Infrequent	Past Year	Weekly	
Mental status	Married	75	86	432	116	709
	Widowed	32	30	32	16	110
	Divorced	5	20	101	44	170
	Never married	14	13	150	57	234
Total		126	149	715	233	1223

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	109.703 ^a	9	.000
Likelihood Ratio	101.384	9	.000
Linear-by-Linear Association	19.964	1	.000
N of Valid Cases	1223		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.33.

Gender of respondent * GAMCLASS

Crosstab

Count

		GAMCLASS				Total
		Non-Gamblers	Infrequent	Past Year	Weekly	
Gender of respondent	Male	48	66	358	132	604
	Female	79	84	361	100	624
Total		127	150	719	232	1228

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.831 ^a	3	.003
Likelihood Ratio	13.924	3	.003
Linear-by-Linear Association	13.763	1	.000
N of Valid Cases	1228		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 62.47.

Age of respondent * GAMCLASS

Crosstab

Count

		GAMCLASS				Total
		Non-Gamblers	Infrequent	Past Year	Weekly	
Age of respondent	18 to 24 Years	6	9	104	44	163
	25 to 34 Years	13	13	127	40	193
	35 to 44 Years	17	31	177	50	275
	45 to 64 Years	37	43	218	66	364
	65 Years and Over	51	53	81	32	217
NR		2	1	12	1	16
Total		126	150	719	233	1228

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	119.862 ^a	15	.000
Likelihood Ratio	112.044	15	.000
Linear-by-Linear Association	2.212	1	.137
N of Valid Cases	1228		

a. 3 cells (12.5%) have expected count less than 5. The minimum expected count is 1.64.

Composite Race * GAMCLASS

Crosstab

Count

		GAMCLASS				Total
		Non-Gamblers	Infrequent	Past Year	Weekly	
Composite Race	White	111	142	646	206	1105
	Am Ind/Ak Nat	8	3	49	21	81
	Other	6	4	12	4	26
Total		125	149	707	231	1212

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.559 ^a	6	.051
Likelihood Ratio	13.177	6	.040
Linear-by-Linear Association	1.250	1	.264
N of Valid Cases	1212		

a. 3 cells (25.0%) have expected count less than 5. The minimum expected count is 2.68.

Household income * GAMCLASS

Crosstab

Count

		GAMCLASS				Total
		Non-Gamblers	Infrequent	Past Year	Weekly	
Household income	Less than \$10,000	34	34	110	28	206
	\$10,000-14,999	10	6	44	16	76
	\$15,000-19,999	12	13	45	20	90
	\$20,000-34,999	30	35	174	50	289
	\$35,000-49,999	24	34	135	45	238
	\$50K or more	16	28	208	73	325
Total		126	150	716	232	1224

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	37.459 ^a	15	.001
Likelihood Ratio	38.797	15	.001
Linear-by-Linear Association	23.770	1	.000
N of Valid Cases	1224		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.82.

EDUCCPS * GAMCLASS

Crosstab

Count

		GAMCLASS				Total
		Non-Gamblers	Infrequent	Past Year	Weekly	
EDUCCPS	Less than HS	26	15	46	25	112
	HS and some Post	64	94	452	163	773
	BA and over	36	40	219	44	339
Total		126	149	717	232	1224

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	38.291 ^a	6	.000
Likelihood Ratio	35.013	6	.000
Linear-by-Linear Association	.099	1	.753
N of Valid Cases	1224		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.53.

Crosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Martial status * PVLIFE	1098	99.8%	2	.2%	1100	100.0%
Gender of respondent * PVLIFE	1100	100.0%	0	.0%	1100	100.0%
Age of respondent * PVLIFE	1100	100.0%	0	.0%	1100	100.0%
Composite Race * PVLIFE	1088	98.9%	12	1.1%	1100	100.0%
Household income * PVLIFE	1098	99.8%	2	.2%	1100	100.0%
EDUCCPS * PVLIFE	1099	99.9%	1	.1%	1100	100.0%

Marital status * PVLIFE

Crosstab

Count

		PVLIFE		Total
		No Problem	Problem	
Martial status	Married	605	30	635
	Widowed	75	2	77
	Divorced	143	22	165
	Never married	205	16	221
Total		1028	70	1098

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.401 ^a	3	.000
Likelihood Ratio	16.155	3	.001
Linear-by-Linear Association	4.660	1	.031
N of Valid Cases	1098		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 4.91.

Gender of respondent * PVLIFE

Crosstab

Count

		PVLIFE		Total
		No Problem	Problem	
Gender of respondent	Male	522	33	555
	Female	508	37	545
Total		1030	70	1100

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.328 ^a	1	.567		
Continuity Correction ^a	.202	1	.653		
Likelihood Ratio	.328	1	.567		
Fisher's Exact Test				.622	.327
Linear-by-Linear Association	.328	1	.567		
N of Valid Cases	1100				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 34.68.

Age of respondent * PVLIFE

Crosstab

Count

		PVLIFE		Total
		No Problem	Problem	
Age of respondent	18 to 24 Years	143	14	157
	25 to 34 Years	168	11	179
	35 to 44 Years	244	14	258
	45 to 64 Years	305	22	327
	65 Years and Over	158	7	165
	NR	12	2	14
Total		1030	70	1100

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.906 ^a	5	.427
Likelihood Ratio	4.539	5	.475
Linear-by-Linear Association	1.127	1	.288
N of Valid Cases	1100		

a. 1 cells (8.3%) have expected count less than 5. The minimum expected count is .89.

Composite Race * PVLIFE

Crosstab

Count

		PVLIFE		Total
		No Problem	Problem	
Composite Race	White	938	57	995
	Am Ind/Ak Nat	63	10	73
	Other	18	2	20
Total		1019	69	1088

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.732 ^a	2	.021
Likelihood Ratio	6.132	2	.047
Linear-by-Linear Association	3.117	1	.077
N of Valid Cases	1088		

a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 1.27.

Household income * PVLIFE

Crosstab

Count

		PVLIFE		Total
		No Problem	Problem	
Household income	Less than \$10,000	153	18	171
	\$10,000-14,999	57	9	66
	\$15,000-19,999	70	8	78
	\$20,000-34,999	244	16	260
	\$35,000-49,999	207	7	214
	\$50K or more	297	12	309
Total		1028	70	1098

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	19.426 ^a	5	.002
Likelihood Ratio	18.227	5	.003
Linear-by-Linear Association	15.781	1	.000
N of Valid Cases	1098		

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 4.21.

EDUCCPS * PVLIFE

Crosstab

Count

		PVLIFE		Total
		No Problem	Problem	
EDUCCPS	Less than HS	74	12	86
	HS and some Post	659	51	710
	BA and over	295	8	303
Total		1028	71	1099

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.921 ^a	2	.000
Likelihood Ratio	16.016	2	.000
Linear-by-Linear Association	15.508	1	.000
N of Valid Cases	1099		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.56.

Appendix N

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UM ITRR Nonresident Visitor Survey Methodology

Montana Nonresident Visitor Studies:

A summary of methods for estimating visitation,
characterizing visitors, and estimating economic impacts

Institute for Tourism and Recreation Research
School of Forestry
The University of Montana
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Nonresident visitors to Montana impact the state and its economy. One of the Institute for Tourism and Recreation Research's (ITRR) roles is to estimate the number of visitors coming to Montana each year and to estimate their economic impact on the state.

A nonresident visitor is defined as any person traveling in Montana whose current state of residence is not Montana. Nonresident visitors could be traveling in Montana for a multitude of reasons including: vacation, visiting friends and relatives, just passing through on route to another destination, business, medical, shopping, or attending a convention. (Note: nonresidents traveling by train, bus, charter group, or commercial truck are *not* included in ITRR studies.)

Estimating the number of visitors to Montana

In 1988, ITRR developed a model for estimating visitors. Since then, the model has been refined and used annually to estimate visitation to the state. The model is based on the visitor's entry point into the state (because, by definition, every nonresident has to enter Montana somewhere). People enter Montana via highways, airports, and trains. Highway traffic counter data are gathered monthly from the Montana Department of Transportation, the Idaho Transportation Department, the Wyoming Department of Transportation, and the North Dakota Department of Transportation. Canadian border crossing data are gathered semi-annually from the US Customs Service. Airport passenger deboarding data are gathered monthly from the Montana Airport Manager's Association. Due to the relatively small number of people traveling by train, those data are excluded from the model.

Obviously not all people crossing Montana's borders are nonresidents. In order to accurately estimate the number of nonresidents, ITRR conducts resident-nonresident proportion counts at borders and in airports on randomly selected days at randomly selected times. Those proportions are then applied to the highway, airport, and Canadian border crossing data to estimate the number of nonresidents visiting Montana.

Surveying visitors

ITRR conducts nonresident travel studies every two or three years. The studies involve intercepting nonresident visitors while they are in Montana. ITRR surveyors are stationed at various rest areas, gas stations, Canadian border crossings, and airports throughout Montana.

Their goal is to intercept nonresidents in personal vehicles (i.e., not commercial) with out-of-state license plates or in the boarding areas at airports.

Sampling frame

A sampling frame for intercepting visitors is developed based on visitor entry points to Montana. Trend data from ITRR's years of estimating visitation allow for an understanding of where visitors enter the state. For example, by examining highway and proportion count data, it is known that approximately 20 percent of nonresidents enter Montana from I-90 west at the Idaho border from December through March. Therefore, during the winter '97-'98 nonresident study, 20 percent of the surveyors' time was scheduled in Missoula and west on I-90. This is called a stratified random sampling technique and is regarded as a reliable way to design a sampling frame.

Intercept questions

When the visitors are intercepted, they are asked a series of basic questions about their travel group:

- Location where the group entered the state on this trip (identified with a map of Montana)
- Size of travel group while on this trip
- Type of travel group while on this trip (i.e., alone, as a couple, etc.)
- Home state
- Travel method/primary mode of transportation (i.e., car, RV, motorcycle, etc.)
- Purpose of this trip to Montana
- Whether group had visited Montana before
- Number of nights already spent in Montana while on this trip
- Number of nights that will be spent in Montana while on this trip

These intercepted visitors represent the study sample. Because these intercepted visitors are randomly selected, data from these responses are assumed to be representative of the population of all visitors to Montana.

The survey

Intercepted visitors are then asked to complete a more detailed mail-back survey. Survey questions pertain to visitor group characteristics, length of stay in Montana, type of accommodations, activities, reasons for visiting and attractions to Montana, a map of the group's travel route, expenditures, and other topics.

Research has shown that the best time to ask people about their expenditures, activities, travel patterns, etc., is either while they are on their trip or immediately after their trip. The longer the time between when they did the activities until when they report their behaviors, the less accurate the data (referred to as non-response bias). Research has also shown that people tend to over-estimate their expenditures, activity participation, etc., when they wait longer to report them. Therefore, to ensure accuracy of responses, Montana visitors are asked to fill out their survey while on their trip.

Specifically, in terms of expenditures, visitors are asked to record one day's worth of their travel group's spending. Each survey specifies a date on which expenditures are to be recorded (the

days are chosen by the survey team in order to achieve a good representation of various days during trips). Travelers are given several expenditure categories:

- hotel, motel, lodge, bed and breakfast
- campground, RV park
- auto/RV rental, repair
- transportation fares
- gasoline, oil
- restaurant, bar
- groceries, snacks
- retail goods
- miscellaneous expenses, services

They are also asked to indicate the location of each purchase and specifically describe each retail and service purchase (e.g., lift ticket, clothing). Expenditure data is carefully analyzed and adjusted where needed (e.g., package deals are disaggregated, we are sure to include only one night's worth of spending, outliers are delimited).

Approximately 45-50 percent of intercepted visitor groups return the travel surveys. Because the nature of the methodology is such that front-end intercept surveyors do not collect name and address information from visitors, it is not possible to conduct a traditional telephone non-response bias check to compare the characteristics of those who did not return their surveys to those who did return their surveys. Instead, we repeat several of our "intercept questions" in our mail-back survey. Data collected at the time of the intercept are compared to data on the returned surveys. In order to adjust for non-response bias, data from the front-end intercepts are then used to adjust data from the returned surveys where necessary.

Also, as described above, we try to mirror the nonresident visitor estimation model (where people enter the state) when we sample. But, it is not possible to be 100% accurate. To correct for sampling error, we adjust (i.e., "weight") our data based on visitor entry point. For example, once sampling was completed for the winter 1997-98 study, the data were checked to compare the proportion of the sample who came in the state at each entry point to the proportion of nonresident traffic at each entry point. If there were discrepancies, the data were weighted to more accurately reflect the nonresident visitor estimation model.

Economic estimates

ITRR estimates the amount of spending by nonresident travelers using visitation data combined with survey data. Total spending estimates are a function of three key pieces of information:

- the number of visitor groups;
- the average amount groups spent per day; and
- the average number of days groups spent in the state.

Survey data also provide information about how groups spent their money (e.g., how much was spent on hotels, gasoline, or restaurants). Detailed spending patterns from surveys, along with other sources of data such as personal consumption spending patterns, are used to allocate visitor dollars to the appropriate sectors of the economy in a Montana input-output (I-O) model created in IMPLAN¹. IMPLAN is then used to estimate the number of jobs and the amount of income

¹ Impact Analysis for PLANNing, a database containing information on regional economics and an economic modeling program that can be used to estimate the impacts of spending or changes in an economy (Minnesota IMPLAN Group, 1991 and Olson and Lindall, 1996).

(employee compensation, proprietor's income, and property income) directly associated with nonresident travelers' spending.

In the past, ITRR has produced figures estimating indirect and induced impacts associated with nonresident travelers' spending. The current input-output model we are using was created with Type II multipliers, which are a relatively recent addition to the IMPLAN software system (earlier versions of the software included only Type III multipliers). The induced effects associated with these two types of multipliers differ, with the Type II multipliers containing more realistic assumptions about household spending impacts associated with a change in the economy. IMPLAN developers recommend using the Type II multipliers (Olson and Lindall, 1996). Due to the tools available at the time, previous I-O models were built using Type III multipliers. The use of Type II multipliers results in smaller induced impacts (direct and indirect impacts are not affected).

Several aspects of the economic model have been and are continuing to be reviewed and checked in order to provide the most accurate estimates possible. We have recently made modifications to the model, and anticipate that additional minor modifications will be made before the final 1998 estimates are produced.

Further reading

For an analysis of the relative role of nonresident travel in Montana's economy, see "Nonresident Travel in Montana: Putting the Numbers into Context" (ITRR's Technical Completion Report 98-2). For results from the 1996 summer nonresident travel study, see "Nonresident Summer Travelers to Montana" (ITRR's Research Report 51), "Nonresident Summer Travelers to Montana: Market Profiles" (ITRR's Research Report 52), "Nonresident Summer Travelers to Montana: Tourism Region Report" (ITRR's Research Report 55), and "Nonresident Comments About Montana, Volumes 1-4" (ITRR's Research Reports 56v1, 56v2, 56v3, 56v4). For results from the 1998 winter study, see "Winter Nonresident Travelers to Montana: Profiles and Characteristics" (ITRR's Research Report 59) and "Nonresident Winter Visitor: Comments About Montana" (ITRR's Research Report 58).

Minnesota IMPLAN Group, Inc. 1991. "IMPLAN System" (data and software). Stillwater, MN.

Olson, Doug and Scott Lindall. 1996. "IMPLAN Professional Software, Analysis, and Data Guide." Stillwater, MN: Minnesota IMPLAN Group, Inc.

Prepared by Kristin Aldred Cheek, MS and Rita J. Black, PhD for the Montana economists' meeting, September 14, 1998.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the integrity of the financial system and for the ability to detect and prevent fraud.

2. The second part of the document outlines the specific procedures for recording transactions. It details the steps involved in the accounting process, from the initial entry of data into the system to the final reconciliation of accounts.

3. The third part of the document addresses the issue of data security. It discusses the various risks associated with the loss or theft of financial data and provides recommendations for implementing robust security measures to protect this critical information.

4. The fourth part of the document focuses on the role of technology in modern accounting. It explores the benefits of using specialized software for financial management and discusses the challenges associated with integrating new technologies into existing systems.

5. The fifth part of the document concludes by summarizing the key points discussed and reiterates the importance of adhering to the established procedures and standards for financial record-keeping.

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